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# **WATER SUPPLY OUTLOOK FOR WASHINGTON**



**U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE**

Collaborating with

DEPARTMENT OF ECOLOGY STATE OF WASHINGTON

AS OF  
**APR. 1, 1974**

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

## TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

*Cover Photo: Snow Surveyors near Ship Creek,  
Alaska snow course.*

U.S. GOVERNMENT PRINTING OFFICE

## PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 511 N. W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

## PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia





# **WATER SUPPLY OUTLOOK FOR WASHINGTON**

and  
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

*Issued by*

KENNETH E. GRANT  
ADMINISTRATOR  
SOIL CONSERVATION SERVICE  
WASHINGTON, D.C.

|||||

*Released by*

GALEN S. BRIDGE  
STATE CONSERVATIONIST  
SOIL CONSERVATION SERVICE  
SPOKANE, WASHINGTON

*In Cooperation with*

JOHN A. BIGGS  
DIRECTOR  
DEPARTMENT OF ECOLOGY  
STATE OF WASHINGTON

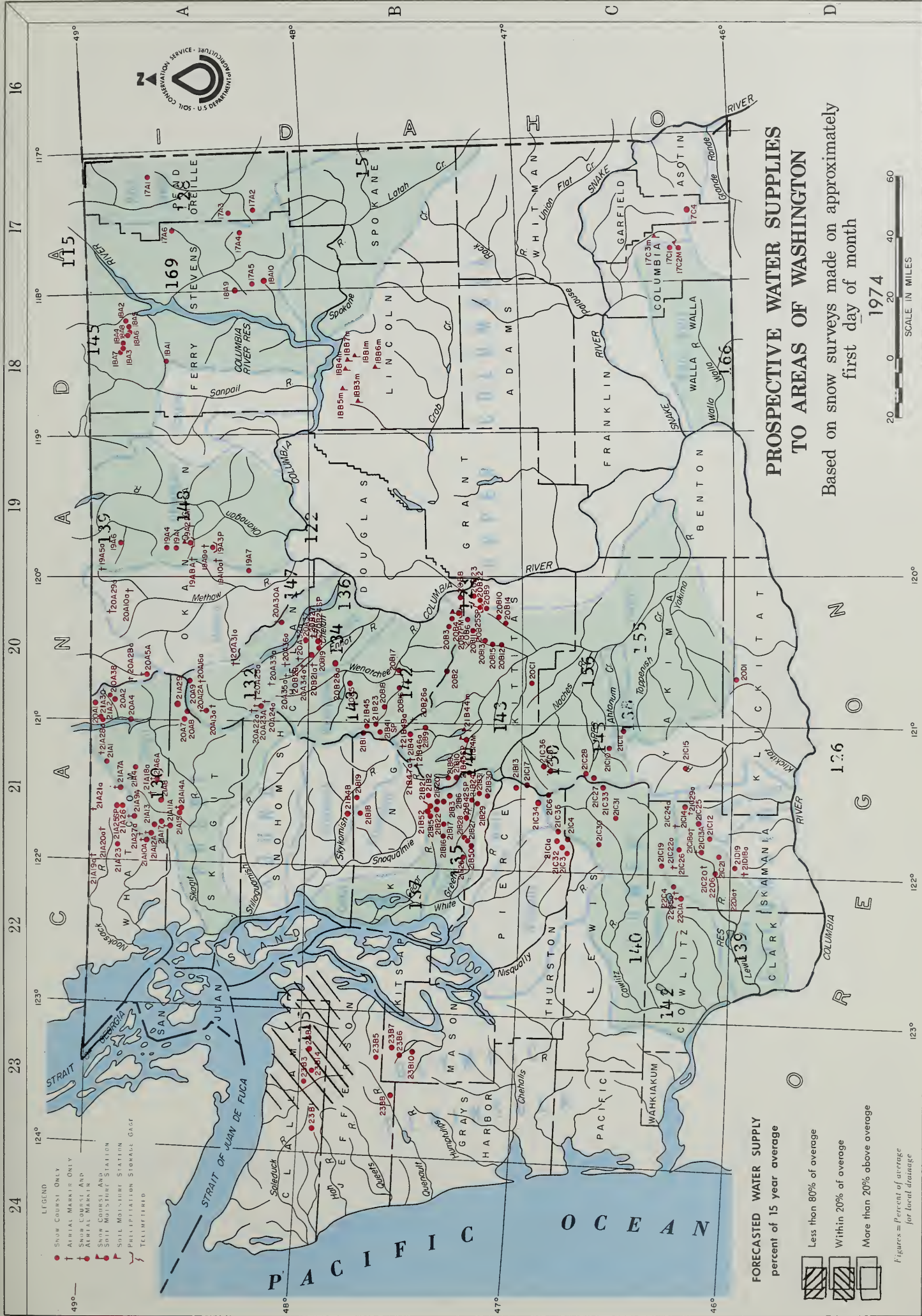
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*Report prepared by*

ROBERT T. DAVIS, Snow Survey Supervisor

SOIL CONSERVATION SERVICE  
360 U.S. COURTHOUSE  
SPOKANE, WASHINGTON 99201



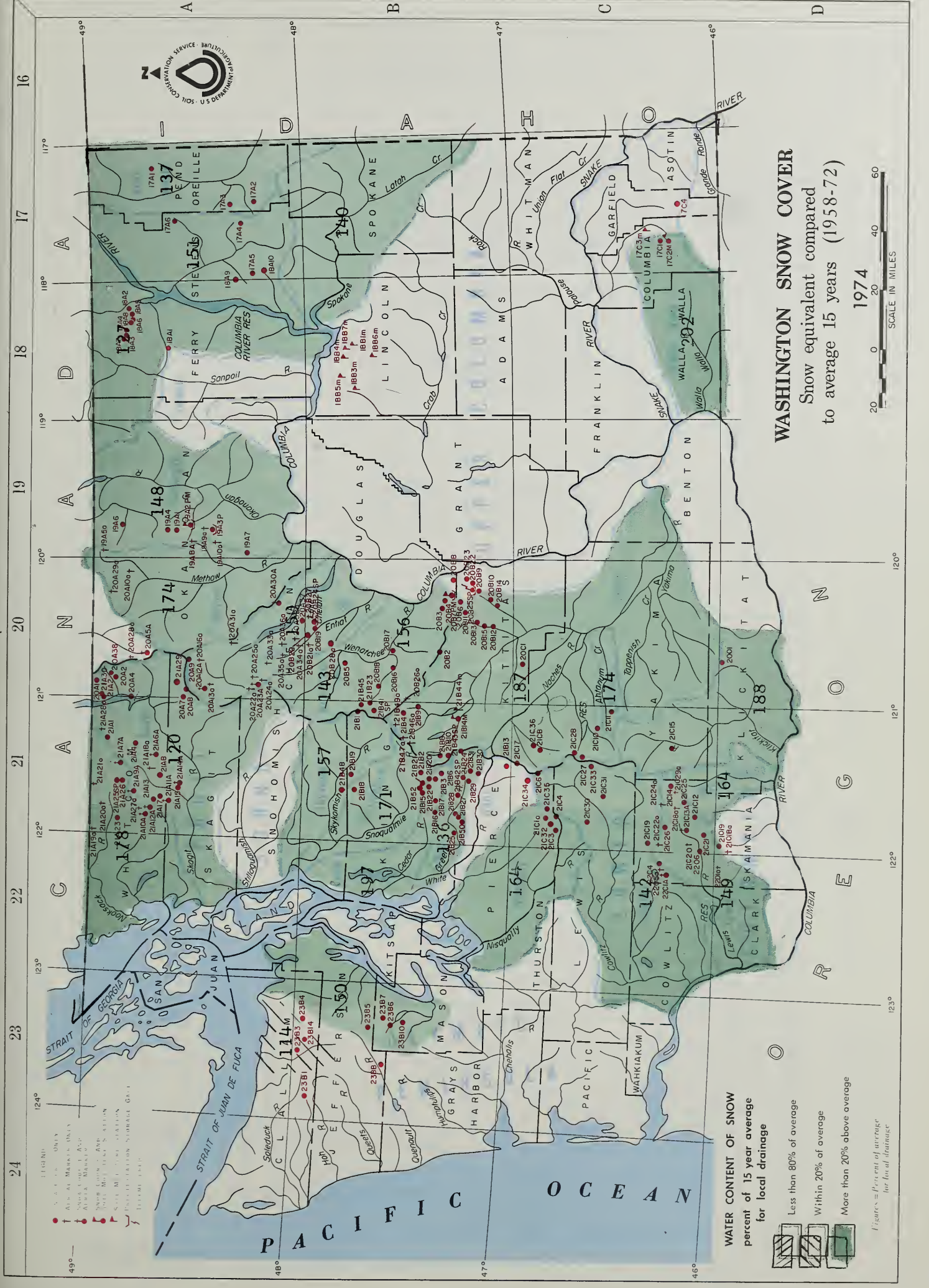




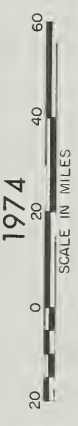
INDEX to WASHINGTON SNOW COURSES, SOIL MOISTURE STATIONS and PRECIPITATION STORAGE GAGES

NAME	NUMBER	SEC.	RANGE	ELEV.	NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.	NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.					
UPPER COLUMBIA DRAINAGE																					
Pend Oreille River																					
Boyer Mountain	1742	7	31N	43E	5250	Wenatchee River (continued)											Trough #2				
Enchgrass Meadow	1741	24	37N	44E	5000	20B2SSP 10 20N 20E											5310				
Winchester Creek	1743	30	33N	43E	2970	Coloquum Creek											Coloquum Creek Upper				
						20B22 11 20N 20E											5300				
						Coloquum Creek Lower											20B23 1 20N 20E				
						4300											Squilehook Creek				
						20B3 12 21N 19E											4400				
						20B4 18 21N 20E											3400				
						Beehive Springs											Scout-A-Vista				
						20B8 34 21N 20E											4450				
						20B6 30 21N 20E											5000				
						20B7PM 30 21N 20E											4400				
						Upper Wheeler											Stemilt Slide				
						2088 34 21N 20E											4450				
						2086 30 21N 20E											5000				
						2087PM 30 21N 20E											4400				
						Summit G. S.											Upper Wheeler				
						1847 20 39N 35E											4600				
						Colville River											Creston-Kunz				
						1726 19 36N 42E											3215				
						1839 34 32N 38E											2885				
						1744 11 32N 41E											4925				
						1745 26 31N 38E											4990				
						1810 6 29N 38E											3370				
						Togo											Sherman				
						1810 6 29N 38E											3370				
						Sonpoil River											Mhearridge				
						1841 19 36N 35E											5350				
						Sherman Creek Pass											Yokimo River				
						1841 19 36N 35E											5350				
						Okonogon River											Ahtanum R. S.				
						1948A 2 36N 23E											7000				
						1949A 20 36N 24E											6750				
						1941 30 37N 24E											5700				
						Mutton Creek No. 1											Coloquum Pass				
						1941 30 37N 24E											6000				
						20A28A 32 40N 18E											4300				
						19A3P 18 35N 24E											4000				
						19A2PM 33 37N 24E											4500				
						19A10A 15 35N 23E											6750				
						19A6 30 39N 25E											2845				
						Tous Coulee											Methow River				
						19A6 30 39N 25E											2845				
						Bally Goat Pass											20A10A 10 38N 20E				
						20A29A 8 39N 20E											6400				
						Dolliar Ranch											20A5A 4 37N 18E				
						20A5A 4 37N 18E											6500				
						Harts Pass											19A5A 15 40N 23E				
						Horseshoe Basin											19A7 36 34N 23E				
						19A7 36 34N 23E											4650				
						Chelan Lake Basin											20A22A 12 31N 15E				
						20A22A 12 31N 15E											6500				
						20A25A 3 31N 16E											3540				
						20A24A 8 31N 16E											5275				
						20A23A 18 31N 16E											5900				
						20A13A 18 31N 16E											2220				
						20A12A 3 34N 17E											3730				
						20A16A 3 34N 17E											4780				
						20A9 21 35N 17E											4780				
						20A30A 32 31N 20E											6300				
						20A31A 34 33N 18E											6500				
						War Creek Pass											20A31A 34 33N 18E				
						20A31A 34 33N 18E											6500				
						Entiat River											20B28A 19 28N 18E				
						20B28A 19 28N 18E											5425				
						20B19 54 28N 19E											1600				
						20B19 54 28N 19E											1600				
						20A34 2 29N 17E											3150				
						20A34 2 29N 17E											3150				
						Four Mile Ridge											20B27A 15 28N 19E				
						20B27A 15 28N 19E											7000				
						20A36A 17 30N 18E											6510				
						20B20 22 29N 18E											1300				
						20B21SN 22 29N 18E											1300				
						20A32A 34 30N 18E											6400				
						20A37 20 29N 19E											6200				
						20A55A 21 30N 17E											3850				
						20B11A 10 28N 18E											5300				
						Tommy Creek											20B11A 10 28N 18E				
						20B11A 10 28N 18E											5300				
						Wenatchee River											21B23 7 26N 13E				
						21B41SN 13 26N 11E											5211				
						20B2 35 22N 17E											1270				
						20B16 1 25N 17E											1810				
						20B15 33 23N 17E											1773				
						20B17 1 21N 17E											1127				
						20B1 1 26N 16E											2140				
						20B1 14 26N 13E											1070				
						21B15 12 26N 13E											3700				
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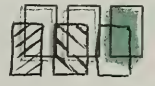




**WASHINGTON SNOW COVER**  
Snow equivalent compared  
to average 15 years (1958-72)



**WATER CONTENT OF SNOW**  
percent of 15 year average  
for local drainage



Less than 80% of average  
Within 20% of average  
More than 20% above average

Figures = Percent of average  
for local drainage



INDEX to WASHINGTON SNOW COURSES, SOIL MOISTURE STATIONS and PRECIPITATION STORAGE GAGES

NAME	NUMBER	SEC.	TWP.	RANGE	ELEV.
UPPER COLUMBIA DRAINAGE					
Pend Oreille River					
Boyer Mountain	1742	7	31N	13E	5250
Funchgrass Meadow	1741	24	37N	44E	5000
Winchester Creek	1743	30	33N	45E	2970
Kettle River					
Boulder Road	1842	36	39N	36E	1450
Butte Creek	1843	28	39N	35E	4070
Cabin Creek	1848	5	38N	36E	3170
Gout Creek	1844	26	39N	35E	3595
Snow Caps Creek	1845	3	38N	36E	2150
Snow Caps Trail	1846	5	38N	36E	2720
Summit G. S.	1847	20	39N	35E	4600
Colville River					
Baird	1746	19	36N	42E	3215
Carlson	1854	34	32N	38E	2885
Chewelah	1744	11	32N	41E	4925
Stranger Mountain	1745	26	31N	38E	4990
Togo	18410	6	29N	38E	3370
Sonpoll River					
Sherman Creek Pass	1841	19	36N	35E	5350
Okanogan River					
Clark	1948a	2	36N	23E	7000
Muckamuck	1949a	20	36N	24E	6750
Mutton Creek No. 1	1941	30	37N	24E	5700
Mutton Creek No. 2	1944	19	37N	24E	6000
Paysayten	20428a	32	40N	18E	4300
Rusty Creek	1943P	18	35N	24E	4000
Salmon Meadows	1942PM	33	37N	24E	4500
Starvation Mtn.	19410a	15	35N	23E	6750
Touts Coulee	1946	30	39N	25E	2845
Methow River					
Billy Goat Pass	20410a	10	38N	20E	6400
Dollar Hatch	20429a	8	39N	20E	7000
Harts Pass	2045a	7	37N	18E	6500
Horseshoe Basin	1945a	15	40N	23E	7000
Loup Loup	1947	36	34N	23E	4650
Chelton Lake Basin					
Cloudy Pass	20422a	12	31N	15E	6500
Greenwood Flat	20425a	3	31N	16E	3540
Little Meadows	20424a	8	31N	16E	5275
Lymann Lake	20423a	18	31N	16E	5900
Park Creek Flat	20413a	18	34N	16E	2220
Park Creek Ridge	20412a	7	34N	16E	4600
Petersons	20416a	3	34N	17E	3730
Rainy Pass	2049	21	35N	17E	4780
Safety Harbor	20430a	32	31N	20E	6300
War Creek Pass	20431a	34	33N	18E	6500
Entiat River					
Blue Creek G.S.	20428a	19	28N	18E	5425
Brice	20419	34	28N	19E	1600
Lariat Meadows	20433a	28	31N	17E	1800
Lariat River Trail	20434a	2	29N	17E	3150
Four Mile Ridge	20427a	15	28N	19E	7000
Hop Camp	20436a	17	30N	18E	6510
Hope Ridge	20420	22	29N	18E	4300
Hope Ridge Snow Pillow	20421SP	22	29N	18E	4300
Hugh Ridge	20432a	34	30N	18E	6400
Shady Pass	20437	20	29N	19E	6200
Snow Brushy	20435a	21	30N	17E	3850
Tommy Creek	20431a	10	28N	18E	5300
Wenatchee River					
Berne-Mill Creek	214825	7	26N	15E	2725
Berne-Mill Creek (New)	214815P	13	26N	14E	3210
Blewett Pass No. 2	20482	35	22N	17E	1270
Chiwaukum G. S.	20416	4	25N	17E	1810
Lake Wenatchee	20485	53	27N	17E	1470
Leavenworth R. S.	20417	1	24N	17E	1127
Merritt	20418	1	26N	16E	2110
Stevens Pass	21461	14	26N	15E	1970
Stevens Sand Sled	21415	12	26N	14E	5700
Wenatchee River (continued)					
Trough #2	20425SP	10	20N	20E	5310
Colockum Creek					
Colockum Creek Upper	204822	11	20N	20E	5500
Colockum Creek Lower	204823	1	20N	20E	4500
Squilchuck Creek					
Beehive Springs	20483	12	21N	19E	4400
Scout-A-Vista	20484	18	21N	20E	3400
Stemilt Creek					
Jump-Off	20488	34	21N	20E	4450
Stemilt Slide	20486	30	21N	20E	5000
Upper Wheeler	20487PM	30	21N	20E	4400
Crab Creek					
Creston-Kunz	1841m	32	27N	34E	2440
Jack Woods	1845m	28	27N	31E	2750
Krause	1844m	21	27N	35E	2420
Sheffels	1845m	17	27N	32E	2378
Sherman	1847m	24	27N	33E	2440
Meadridge	1848m	24	25N	32E	2290
Yakima River					
Altman R. S.	21411	26	12N	14E	3100
Big Boulder Creek	21489	35	23N	14E	3200
Bumping Lake	2148	23	16N	12E	3450
Bumping Lake New	21436	13	16N	12E	3400
Colockum Pass	20489	25	20N	20E	5370
Cooke Creek	204810	17	19N	20E	4123
Domery Flat	214844m	15	20N	14E	2200
Fish Lake	21484	34	24N	14E	3371
Green Lake	21410	3	12N	13E	6000
Grouse Camp	204811	29	21N	19E	5385
High Creek	204812	34	20N	19E	2930
Joe Lake	21486a	22	23N	12E	4624
Lake Cle Elum	214844	15	20N	14E	2200
Lemah Creek	21487a	7	23N	13E	3327
Manastash	2041	24	17N	16E	3935
Morse Lake	21417	6	16N	11E	5400
Nannan	204813	4	20N	19E	5875
Trail Creek	204814	20	19N	20E	3560
Tunnel Avenue	2148	13	31N	11E	2450
Van Epps Pass	204826a	16	22N	15E	5925
Walters Flat	204815	22	20N	19E	3360
White Pass (East Side)	21484a	12	23N	13E	3024
White Pass (Leach Lake)	21427	1	13N	11E	4500
LOWER COLUMBIA DRAINAGE					
Asotin Creek					
Spruce Springs	1741	9	8N	40E	5700
Mill Creek					
Couse	1743m	2	9N	40E	5370
Homestead	1741	11	9N	40E	4030
Martin Springs (Heimers SW)	1742M	23	9N	40E	4400
Klickitat River					
Satus Pass	2001	21	6N	17E	4030
West Fork Cabin	21415	23	9N	12E	5000
White Salmon River					
Galtus Creek	21412	35	7N	8E	4000
Lewis River					
Blue Lake	21422a	19	9N	8E	4800
Bob's Trail	21431	25	8N	7E	2200
Colimarty Ridge	2201a	8	5N	5E	2500
Connect Pass	21418a	24	9N	9E	1200
Lewis River (continued)					
Divide Meadow	21429a	21	9N	10E	5600
Grand Meadow	21425	28	8N	9E	3500
Lone Pine Shelter	21426	8	9N	7E	3800
Marble Mountain	21426a	24	8N	5E	3200
New Muddy River	21426	26	8N	6E	2000
Oldman Pass	21419	22	6N	7E	3100
Plains of Abraham	21421a	35	9N	5E	4400
Smith Creek Road	21424	29	9N	6E	2100
Spencer Meadow	21420a	16	8N	7E	3400
Surprise Lakes	21423a	14	7N	8E	4250
Table Mountain	21424a	20	9N	9E	4200
Timbered Peak	21418a	36	6N	6E	3000
Cowlitz River					
Cayuse Pass	2146	15	16N	10E	5300
Mosquito Meadows	21419	33	10N	7E	4100
Onahapcosh	21432	28	15N	10E	2200
Packwood Lake	21431	21	13N	10E	2870
Pigtail Peak	21433	11	13N	11E	5900
Potato Hill	21414	36	10N	10E	4500
Williams Creek	21430	3	13N	8E	3250
Nisqually River					
Ghost Forest	2144	23	15N	8E	4550
Longfist	2143	29	15N	8E	2760
Paradise Park (New)	21435	13	15N	8E	5050
Stom Glade	2141	13	15N	8E	5050
White River					
Corral Pass	21413	30	18N	11E	6000
White River Campground	21434	4	16N	9E	
Green River					
Airstrip	21424	18	20N	11E	1800
Charley Creek	21425	27	21N	8E	1200
Cougar Mountain	21442SP	21	21N	9E	3200
Grass Mountain No. 2	21487	14	20N	8E	2900
Grass Mountain No. 3	21488	12	20N	8E	2100
Lester Creek	21429	36	20N	10E	3100
Lynn Lake	21450	21	20N	8E	4000
Sawmill Ridge	21451	5	19N	11E	4700
Snowshoe Butte	21443SP	14	20N	11E	5000
Stampede Pass	21410	25	21N	11E	3860
Twin Camp	21430	18	19N	11E	4100
Cedar River					
City Cabin	21453	10	21N	10E	2390
Mt. Gardner	21481	30	22N	10E	3300
Mt. Gardner Aux.	21482	31	22N	10E	3500
Mt. Lindsay	21416	31	22N	9E	2500
Mt. Washington	21415	8	22N	9E	3000
Mt. Washington New	21452	8	22N	9E	3000
Rex River	21417	11	21N	9E	2400
South Fork Cedar	2146	24	21N	10E	3000
Tinham Creek	21420	1	21N	10E	3400
Snoqualmie River					
Alpine Meadows	21448	31	27N	9E	3500
Ollalie Meadows	21482	19	22N	11E	3625
South Fork Toit	21418	26	26N	9E	1900
Skykomish River					
Lake Elsiebeth	21419	33	26N	10E	2900
Skagit River					
Beaver Creek Trail	2144	35	39N	12E	2200
Beaver Pass	2141	9	39N	12E	3680
Brown Top	21428a	26	40N	12E	6000
Devils Park	2044	34	38N	16E	5900
Freestout Creek Trail	2041	14	40N	14E	3500
Freestout Meadows	2042	8	40N	16E	5000
Freestout Meadows New	20438	8	40N	16E	5000
Granite Creek	21429	25	36N	16E	3500
Lake Hoscomen	2142	19	40N	14E	2600
Meadows Cabins	2048	29	36N	14E	1900
New Hoscomen Lake	2047	19	40N	14E	2800
Thunder Basin	21430	15	35N	14E	4200
Baker River					
Baker Pass	21427a	1	37N	7E	4900
Lock Butte	21411a	8	36N	8E	3800
Easy Pass	2147a	19	39N	11E	5200
Jasper Pass	2146a	17	38N	11E	5400
Komo Kulshan	21417	31	37N	9E	800
Marten Lake	2149a	23	38N	8E	5600
Mount Blum	21418a	27	37N	10E	5800
Rocky Creek	21412a	20	37N	8E	2100
Schreibers Meadow	21410a	18	37N	8E	3400
S. F. Thunder Creek	21414a	20	36N	9E	2200
Sulphur Creek	21413	22	37N	8E	1600
Three Mile Creek	21415	18	36N	9E	1600
Watson Lakes	21418	25	37N	9E	4500
Nooksack River					
Bald Mountain	21419a	7	40N	7E	4400
Canyon	21420a	20	40N	8E	5100
Glacier Creek	21423	9-10	38N	7E	3700
Panorama New	21426	17	39N	9E	4300
Panorama Snow Pillow	21425SP	17	39N	9E	4300
Twin Lakes	21421a	16	40N	9E	5200
OLYMPIC PENINSULA					
Dungeness River					
Deer Park	2384	1	28N	5W	5200
Morse Creek					
Cox Valley	23814	29	28N	6W	

## WATER SUPPLY OUTLOOK

State of Washington

April 1, 1974

\*\*\*  
\*\*\*  
\*\* As we reported last month, a serious situation could develop in \*\*  
\*\* the watersheds of the state of Washington. Above normal precipi- \*\*  
\*\* tation has occurred during the past month, both at lower eleva- \*\*  
\*\* tions in the form of rain and in the higher elevations in the \*\*  
\*\* form of snow. The potential for high water is more than there. \*\*  
\*\* High water will occur, but to the extent of the stage of the \*\*  
\*\* rivers and how far above flood stage they will go is strictly a \*\*  
\*\* function of the temperatures and precipitation in the upcoming \*\*  
\*\* months. We are going to have damaging flows on most of the \*\*  
\*\* streams in the state of Washington. Whether these streams exceed \*\*  
\*\* flood stage, as I said before, is relative to the weather. If we \*\*  
\*\* receive warm temperatures during the latter part of April and \*\*  
\*\* throughout May and the precipitation continues to be above nor- \*\*  
\*\* mal, high damage will occur, but the probabilities of both of \*\*  
\*\* these situations occurring are not too great. There is no ques- \*\*  
\*\* tion that an adequate water supply will be experienced in each \*\*  
\*\* and every watershed in the state. There is no question that all \*\*  
\*\* areas will have abundant water, the only question now is how \*\*  
\*\* much. As this report is being written, not all data is available. \*\*  
\*\* There have been storms during the last week in March and the \*\*  
\*\* first week in April that have prevented snow survey crews from \*\*  
\*\* completing their jobs in Cowlitz, Skagit and Baker River \*\*  
\*\* Watersheds. Data from these areas is vital to the proper opera- \*\*  
\*\* tion of reservoirs and the forecasting of water supplying. \*\*  
\*\* Estimates have been made, based on previous months readings, for \*\*  
\*\* this missing data and if conditions remain as they have for much \*\*  
\*\* longer, these estimates will be well below that which is \*\*  
\*\* evidently being measured. All forecasts made on April 1 have \*\*  
\*\* been increased as high as 20% from those which were made last \*\*  
\*\* month. The snow pack currently runs from a low of 14% above \*\*  
\*\* normal on the northern slopes of the Olympic Peninsula to a high \*\*  
\*\* of 102% above normal for the Mill Creek Drainage in southeastern \*\*  
\*\* Washington. River flows during the month varied from a high of \*\*  
\*\* 74% above normal to a low of 15% below. Precipitation during \*\*  
\*\* March was all above normal with the exception of the southeastern \*\*  
\*\* portion of the state. Precipitation records generally are \*\*  
\*\* obtained in the lower elevation valley portions by the National \*\*  
\*\* Weather Service in comparison to snow course records which are \*\*  
\*\* obtained at the higher portions of the watersheds. The reservoirs \*\*  
\*\* range both above and below normal for this time of year, but have \*\*  
\*\* little meaning to the total water supply picture. All reservoirs \*\*  
\*\* will fill and those that have great amounts of water are in the \*\*  
\*\* process of being lowered to control the expected high water of \*\*  
\*\* the spring runoff.

\*\*\*  
\*\*\*





## SNOW COVER

When comparing this years snow packs to that which was measured in 1972, we find a great discrepancy. The snow cover in 1972 was general. It was high at the high elevations and high at the low elevations. This year, any of the snow packs that normally we would expect in the lower elevation zones were washed out by the heavy, warm rains that occurred in November and December. This has left a deficiency in the lower elevations, but at the higher elevations this precipitation occurred as snow and is still being measured by the field crews. In the Upper Columbia Basin, the snow pack ranges from 27% above normal on the Kettle River, both in British Columbia and Washington, to a high of 87% above in the Yakima Drainage. Along the Lower Columbia, the snow pack ranges from a low of 42% above normal on the Cowlitz River to 102% above in the Mill Creek Drainage. The Puget Sound Drainage, in general, ranges from 20% above normal in the Skagit to 97% above in the Cedar. The three snow courses measured in the Skagit Drainage are all at low elevations. This is one of the areas where a good amount of missing data is occurring. This number, therefore, is somewhat misleading. On the Olympic Peninsula, the northern portion of the area has a snow cover that is only 14% above normal, but the Skokomish Drainage, southeast of Mount Olympus, has a snow cover that is 50% above normal.

## RESERVOIRS

Franklin D. Roosevelt Lake reached its lowest elevation around the first of April. The amount of water in the reservoir is so small that the minus factor in useable capacity is larger than the normal figure on the plus range, i.e., -1,878,000 compared to +1,822,000. It is unknown to this office how long the reservoir will be maintained at this low elevation, but there is no question that there will be plenty of water coming down the Columbia in subsequent months to more than fill the evacuated pool. Some of the other reservoirs in the state have less than normal amounts of water in storage and some have more, but management, in all cases, will be releasing water from these reservoirs to help alleviate the expected damage from the high spring runoff. Even the single purpose irrigation reservoirs operated by the Bureau of Reclamation for the irrigation desires in the Yakima Valley will be operated as flood control reservoirs until all assurance that the major high water is past.





## PRECIPITATION

The well above normal rainfall which occurred in November and December is still the massive influence relating to the total winter precipitation reported by the National Weather Service. This winter precipitation ranges from 33% above normal in the central Washington area to 72% above normal in the Pend Oreille-Spokane Drainage Division. March precipitation ranges from 11% below normal in the Southeastern Drainage Division to a high of 46% above normal in the Pend Oreille-Spokane Division.

## SOIL MOISTURE

Again, there has been very little change in the total soil moisture picture throughout the state. Where the stations are at the lower elevations, the soil mantle is getting wetter from a combination of snow melt and rainfall on the snow, but at the higher elevations, everything is still dormant and the soil mantle is remaining essentially the same as it has during the past several months.

## STREAMFLOW

During the month of March, the Okanogan River, as measured at Tonasket, had the highest measured flow, but this, as previously explained, was the result of the evacuation of Okanogan Lake in anticipation of high inflows in that area. The Wenatchee River, as measured at Peshastin, had the lowest flow during the month, 15% below normal. Most of the other stations reported above normal runoff, but this is generally a result of the above normal valley precipitation which fell on bare ground and immediately ran off. The forecasts of streamflow have all been increased from 5% to 25% as a result of the above normal snowfall and precipitation in the several watersheds. The forecasts now range from 15% above normal for the Columbia River at Birchbank to a high of 55% above normal for the Yakima River, as measured near Parker. Numerical forecasts can be found immediately following this narrative statement.



# STREAMFLOW FORECASTS - APRIL 1974

The following summarized runoff forecasts are based principally on mountain snow-cover and on the assumption that precipitation and temperature will be near average from the present time to the end of the forecast period. Appreciable deviations from normal of temperature and/or precipitation will correspondingly modify these forecasts. Streamflow figures for 1973 are preliminary and subject to revision.

Basin, Stream and Station	Forecast Runoff 1974	Seasonal Streamflow in Thousands of Acre-Feet					
		% 15-Yr. Avg.	Fore- Cast period	1973	1972	1971	15-Yr Average 58-72
<u>COLUMBIA BASIN</u>							
<u>Columbia River System</u>							
Columbia River	53200	115	Apr-Sep	34814	52590	48592	46430
at Birchbank <u>1/</u>	43000	115	Apr-Jul	27879	42700	39462	37548
	32700	119	Apr-Jun	20258	31000	29759	27549
Columbia River	84300	122	Apr-Sep	45834	83880	75360	68868
at Grand Coulee <u>1/</u>	72600	124	Apr-Jul	38140	71820	64444	58379
	58000	126	Apr-Jun	29814	56200	51550	46060
Columbia River	93000	123	Apr-Sep	49262	98040	84965	75337
bl Rock Island Dam <u>1/</u>	79000	123	Apr-Jul	41312	84520	73096	64192
	63200	125	Apr-Jun	32102	66100	58235	50604
Columbia River	132000	126	Apr-Sep	65012	134620	123427	104670
at The Dalles, Or <u>1/</u>	114000	127	Apr-Jul	54150	117810	107702	89893
	95000	130	Apr-Jun	43211	96290	88936	73158
<u>PEND OREILLE RIVER SYSTEM</u>							
Pend Oreille River	20500	128	Apr-Sep	7929	20294	19052	15953
bl. Box Canyon <u>1/</u>	18700	127	Apr-Jul	7338	18724	17763	14688
	16200	127	Apr-Jun	6507	16109	15357	12777
<u>KETTLE RIVER SYSTEM</u>							
Kettle River	2710	145	Apr-Sep	1106	2289	2240	1873
nr. Laurier	2580	144	Apr-Jul	1079	2205	2177	1793
	2400	146	Apr-Jun	1010	1965	1927	1640

1/ Observed flow corrected for storage in any of the following reservoirs which are above the station: Kootenay Lake, Hungry Horse, Flathead Lake, Pend Oreille Lake, F. D. Roosevelt Lake, Lake Chelan, Coeur d'Alene Lake, Brownlee, Noxon Reservoir and pumpage at F. D. Roosevelt Lake.





Basin, Stream and Station	Forecast Runoff 1974	Seasonal Streamflow in Thousands of Acre-feet					
		% 15-Yr. Avg.	Fore- cast period	1973	1972	1971	15-Yr Average 58-72
<u>Kettle River System (Cont.)</u>							
Colville River	250	169	Apr-Sep	54	114	170	148
at Kettle Falls	240	175	Apr-Jul	50	103	158	137
	215	168	Apr-Jun	48	94	146	128
<u>Spokane River System*</u>							
Spokane River	4500	151	Apr-Sep	1121	4000	3941	2983
at Post Falls ID <u>2/</u>	4400	152	Apr-Jul	1074	3874	3798	2899
	4200	151	Apr-Jun	1011	3644	3523	2773
<u>Okanogan River System</u>							
Similkameen River	2100	139	Apr-Sep	719	3162	1931	1517
nr. Nighthawk	1960	138	Apr-Jul	675	2998	1840	1424
	1710	140	Apr-Jun	600	2505	1576	1222
Okanogan River	2550	148	Apr-Sep	765	3852	2225	1723
nr. Tonasket	2310	146	Apr-Jul	707	3523	2077	1582
	1980	147	Apr-Jun	622	2895	1772	1349
<u>Methow River System</u>							
Methow River	1520	147	Apr-Sep	512	1959	1339	1031
nr. Pateros	1420	147	Apr-Jul	476	1819	1259	963
	1230	148	Apr-Jun	417	1524	1061	832
<u>Chelan River System</u>							
Chelan River	1700	136	Apr-Sep	777	1865	1550	1253
at Chelan <u>3/</u>	1530	138	Apr-Jul	680	1619	1352	1112
	1220	138	Apr-Jun	544	1250	1019	881
Stehekin River	1200	132	Apr-Sep	541	1235	1093	904
at Stehekin	1030	133	Apr-Jul	447	1044	927	776
	800	133	Apr-Jun	352	772	657	600
Entiat	320	134	Apr-Sep	-	398	310	239
nr. Ardenvoir	295	134	Apr-Jul	-	361	280	220
	240	133	Apr-Jun	-	283	209	180

\* Forecasts made by Jack A. Wilson, Soil Conservation Service, Boise, Idaho

2/ Observed flow corrected for storage in Coeur d'Alene Lake and diversion by Rathdrum Prairie Canal.

3/ Observed flow corrected for storage in Lake Chelan.





Basin, Stream and Station	Forecast Runoff 1974	Seasonal Streamflow in Thousands of Acre-Feet					
		% 15-Yr. Avg.	Fore- cast period	1973	1972	1971	15-Yr Average 58-72
<u>Wenatchee River System</u>							
Wenatchee River at Plain	1880	143	Apr-Sep	790	1926	1637	1312
	1700	143	Apr-Jul	709	1686	1448	1187
	1390	145	Apr-Jun	589	1272	1045	956
Wenatchee River at Peshastin	2540	142	Apr-Sep	1033	2787	2241	1786
	2330	143	Apr-Jul	938	2464	1999	1629
	1850	140	Apr-Jun	786	1883	1454	1324
Stemilt Basin nr. Wenatchee	148 *	107	May-Sep	-	145*	148*	138*
<u>Yakima River System</u>							
Yakima River nr. Martin <u>4/</u>	204	144	Apr-Sep	85	213	192	142
	190	145	Apr-Jul	78	192	179	131
	164	141	Apr-Jun	72	160	139	116
Yakima River at Cle Elum <u>5/</u>	1380	143	Apr-Sep	555	1515	1305	965
	1280	146	Apr-Jul	489	1374	1178	877
	1120	146	Apr-Jun	433	1156	936	764
Yakima River nr. Parker <u>6/</u>	2680	155	Apr-Sep	582	3231	2401	1730
	2650	156	Apr-Jul	590	3071	3627	1701
	2400	152	Apr-Jun	598	2694	1961	1580
Kachess River nr. Easton <u>7/</u>	185	148	Apr-Sep	67	196	172	125
	175	148	Apr-Jul	63	182	163	118
	155	146	Apr-Jun	59	153	130	106
Cle Elum River nr. Roslyn <u>8/</u>	680	143	Apr-Sep	280	750	627	477
	630	144	Apr-Jul	254	673	568	437
	540	145	Apr-Jun	220	538	433	372

\* Thousands of Miners' inches.

4/ Observed flow corrected for storage in Lake Keechelus.

5/ Observed flow corrected for storage in Keechelus, Kachess and Cle Elum Lakes and diversion by Kittitas Canal.

6/ Observed flow corrected for storage in Keechelus, Kachess, Cle Elum, Bumping and Rimrock Lakes and diversions by Roza, Union Gap, New Reservation, Old Reservation and Sunnyside Canals.

7/ Observed flow corrected for storage in Lake Kachess.

8/ Observed flow corrected for storage in Lake Cle Elum.



Basin, Stream and Station	Forecast Runoff 1974	Seasonal Streamflow in Thousands of Acre-Feet					
		% 15-Yr. Avg.	Fore- cast period	1973	1972	1971	15-Yr Average 58-72
<u>Yakima River System (Cont.)</u>							
Bumping River	220	150	Apr-Sep	74	234	193	146
nr. Nile <u>9/</u>	200	150	Apr-Jul	68	209	174	134
	160	143	Apr-Jun	61	156	124	112
American River	190	148	Apr-Sep	70	186	172	128
nr. Nile	175	148	Apr-Jul	65	169	154	118
	150	150	Apr-Jun	58	137	113	100
Tieton River	360	145	Apr-Sep	161	396	326	247
at Tieton Dam <u>10/</u>	315	149	Apr-Jul	128	338	272	211
	255	148	Apr-Jun	102	261	198	172
Naches River	1340	151	Apr-Sep	442	1477	1168	889
nr. Naches <u>11/</u>	1240	153	Apr-Jul	385	1339	1055	810
	1060	152	Apr-Jun	336	1107	833	698
Ahtanum Creek	66	138	Apr-Sep	21	75	63	48
nr. Tampico <u>12/</u>	63	143	Apr-Jul	18	69	57	44
	54	138	Apr-Jun	16	59	48	39
<u>Lower Columbia River System</u>							
Mill Creek							
nr. Walla Walla	45	166	Apr-Sep	17	34	30	27
	40	166	Apr-Jul	13	29	26	24
	35	166	Apr-Jun	11	26	24	21
Lewis River	1870	139	Apr-Sep	773	1597	1827	1342
at Ariel <u>13/</u>	1700	145	Apr-Jul	642	1392	1605	1174
	1500	143	Apr-Jun	556	1236	1341	1052
Cowlitz River	2950	140	Apr-Sep	-	3048	2800	2106
Blw. Mayfield Dam	2650	143	Apr-Jul	-	2672	2463	1846
	2200	139	Apr-Jun	-	2201	1935	1478

9/ Observed flow corrected for storage in Bumping Lake.

10/ Observed flow corrected for storage in Rimrock Lake.

11/ Observed flow corrected for storage in Bumping and Rimrock Lakes and diversions by Tieton, Selah Valley, Wapatox Canals and City of Yakima.

12/ Observed flow of North and South Forks (combined)

13/ Observed flow corrected for storage in Lake Merwin, Yale and Swift Reservoirs.





Basin, Stream and Station	Forecast Runoff 1974	Seasonal Streamflow in Thousands of Acre-Feet					
		% 15-Yr. Avg.	Fore- cast period	1973	1972	1971	15-Yr Average 58-72

Lower Columbia River System (Cont.)

<u>Cowlitz River</u>							
at Castle Rock <u>14/</u>	3930	142	Apr-Sep	1561	3819	3710	2768
	3550	147	Apr-Jul	1344	3331	3253	2416
	2950	142	Apr-Jun	1168	2782	2585	2083

OLYMPIC PENINSULA

Dungeness River System

Dungeness River	190	115	Apr-Sep	-	207	196	165
nr. Sequim	155	113	Apr-Jul	-	171	154	137
	120	115	Apr-Jun	-	127	105	104

PUGET SOUND

Skagit River System

Skagit River	2940	130	Apr-Aug	-	3402	2775	2260
at Newhalem <u>15/</u>							

Cedar River System

Cedar River	125	137	Apr-Sep	-	122	120	91
Cedar Falls							

Green River System

Green River							
Blw. Howard Hanson Dam	420	135	Apr-Sep	165	434	393	312

14/ Observed flow corrected for storage in Mayfield Reservoir.

15/ Observed flow corrected for storage in Diablo, Ross, and Gorge Reservoirs.



# COMPARISON OF SNOW COVER WITH THAT OF PREVIOUS YEARS

The following tabulation of Washington stream basins presents the water content of the snow about April 1, 1974 as percent of the same date in 1973 and 1972 and average of record

Tributary Basin	No. of Courses Average	1974 Snow Water Expressed as percent of		
		1973	1972	1958-72 Avg.

## UPPER COLUMBIA BASIN

Pend Oreille	17	212	124	137
Kettle	16	262	164	127
Colville	3	290	248	151
Spokane	16	311	110	140
Okanogan	37	184	103	148
Methow	8	228	123	174
Chelan	7	215	89	150
Entiat	10	233	99	143
Wenatchee	10	377	92	156
Yakima	20	306	106	187
Ahtanum	2	113	171	174

## LOWER COLUMBIA

Mill Creek	3	507	164	202
Klickitat	1	-	195	188
White Salmon	2	363	116	164
Lewis	16	462	125	149
Cowlitz	4	272	91	142

## PUGET SOUND

Nisqually	4	242	90	164
Green	8	392	106	136
Cedar	6	722	122	197
Snoqualmie	2	368	123	171
Skykomish	3	311	105	157
Skagit	3	485	62	120
Nooksack	5	208	110	178

## OLYMPIC PENINSULA

Skokomish	4	216	134	150
Elwha	1	223	123	114





RESERVOIR STORAGE - 1000 Acre Feet

BASIN OR STREAM	RESERVOIR	USABLE 1/ CAPACITY	1974	Measured (April)		
				1973	1972	Normal*
<u>COLUMBIA</u>						
Spokane	Coeur d'Alene Lake	225.1	263.5	83.9	335.2	174.1
Columbia	Franklin D. Roosevelt Lake	5232.0	-1878.4	1546.3	1242.4	1821.8
Columbia	Banks Lake	761.8	690.8	592.0	680.2	581.4
Okanogan	Conconully Reservoir	13.0	7.2	11.8	10.8	11.8
Okanogan	Salmon Lake	10.5	7.4	9.5	8.6	7.5
Chelan	Lake Chelan	676.1	157.0	121.4	199.5	179.3
<u>YAKIMA</u>						
Yakima	Keechelus Lake	157.8	114.4	112.1	127.5	107.8
Kachess	Kachess Lake	239.0	122.1	196.8	215.3	190.2
Cle Elum	Lake Cle Elum	436.9	225.0	340.5	326.9	283.2
Bumping	Bumping Lake	33.7	5.8	11.7	9.1	11.4
Tieton	Rimrock Lake	198.0	151.2	160.8	145.1	141.7
<u>PUGET SOUND</u>						
Skagit	Ross Reservoir	1202.0	785.7	734.2	833.0	386.1
Skagit	Diablo Reservoir	90.6	83.8	87.5	87.8	85.5
Skagit	Gorge Reservoir	9.8	8.2	8.4	7.8	-

1/ Based on Active Storage

\* 15-year Average 1958-1972



## SOIL MOISTURE - APRIL

Drainage Basin and Station	Number	Elev.	Profile Depth	Inches Total Capacity	Soil Moisture Content		
					Inches as of April 1		
					1974	1973	1972

OKANOGAN

Salmon Meadows	19A2M	4500	48	5.4	3.7	3.0	3.7
Trout Creek	3-M	3600	48	7.3	4.2	3.7	5.6

YAKIMA

Domery Flat	21B20m	2200	48	6.9	4.9	6.1	-
Lake Cle Elum	21B14M	2200	48	12.8	9.1	9.2	-

WALLA WALLA

Couse	17C3m	3650	48	11.1	10.2	9.4	10.5
Helmers	17C2M	4400	48	12.0	10.0	8.3	10.6

WENATCHEE

Upper Wheeler	20B7M	4400	48	12.7	12.3	11.4	12.4
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## FALL SOIL MOISTURE

Drainage Basin and Station	Number	Elev.	Profile Depth	Inches Total Capacity	Soil Moisture Content		
					Inches as of Oct. 1		
					1973	1972	1971

OKANOGAN

Salmon Meadows	19A02M	4500	48	5.4	2.6	2.8	2.7
Trout Creek	3-M	3600	48	7.3	2.8	3.3	3.3

YAKIMA

Domery Flat	21B20m	2200	48	6.9	2.6	4.1	2.1
Lake Cle Elum	21B14M	2200	48	12.8	6.1	8.7	7.1

WALLA WALLA

Couse	17C3m	3650	48	11.1	5.6	6.0	6.2
Helmers	17C2M	4400	48	12.0	7.6	7.7	8.2

WENATCHEE

Upper Wheeler	20B7M	4400	48	12.7	6.0	5.7	6.5
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# PRECIPITATION 1/

## Division Averages and Departures

Drainage Divisions	FALL		WINTER	
	Sept-Oct Observed	1973 <u>2/</u> Departure	Nov. 1973 - Mar. 1974 <u>2/</u> Observed	Departure
Columbia in Canada	5.14	+ 0.67	15.91	+ 3.16
Pend Oreille - Spokane	4.28	- 0.20	32.17	+13.42
Northeastern Washington	3.36	- 0.58	17.93	+ 6.82
Southeastern Washington	3.71	+ 0.48	20.99	+ 7.52
Central Washington	4.68	- 0.07	36.60	+ 9.07
North Central Washington	3.44	+ 1.82	9.48	+ 2.76
Northwest Slope Cascades	11.53	- 1.16	71.63	+19.40
Southwest Slope Cascades	9.69	+ 1.01	57.29	+15.65
Northeastern Washington		- Lower Spokane, Colville, Sanpoil and Lower Kettle Drainages.		
Southeastern Washington		- Touchet, Tucannon and Palouse Drainages.		
Central Washington		- Yakima, Wenatchee and Chelan Drainages.		
North Central Washington		- Methow and Okanogan Drainages.		
Northwest Slope Cascades		- Puget Sound Drainages.		
Southwest Slope Cascades		- Lower Columbia Drainages.		

1/ - Preliminary analysis by National Weather Service from data furnished by Meteorological Services of Canada and the National Weather Service.

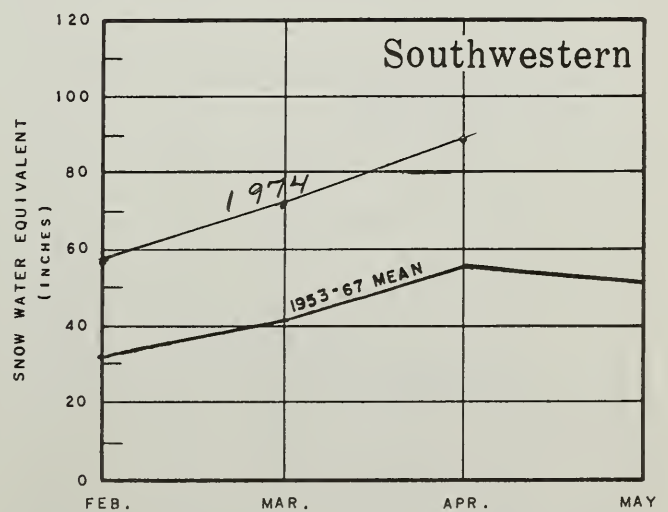
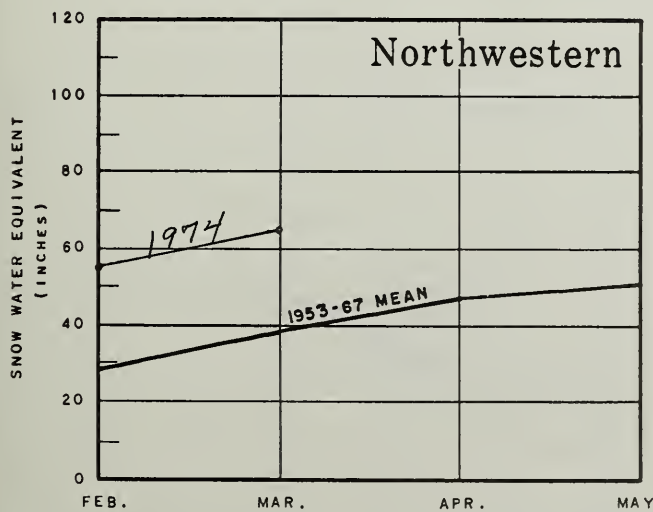
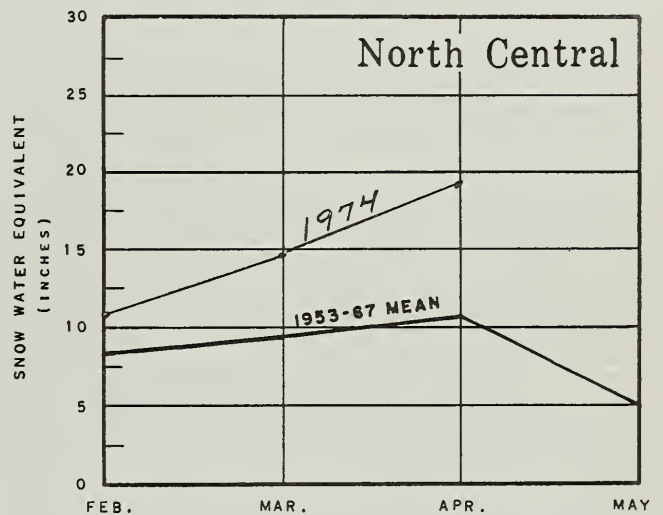
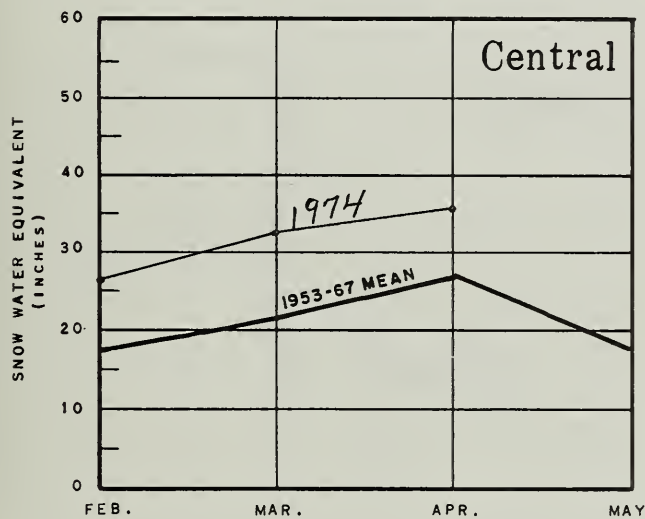
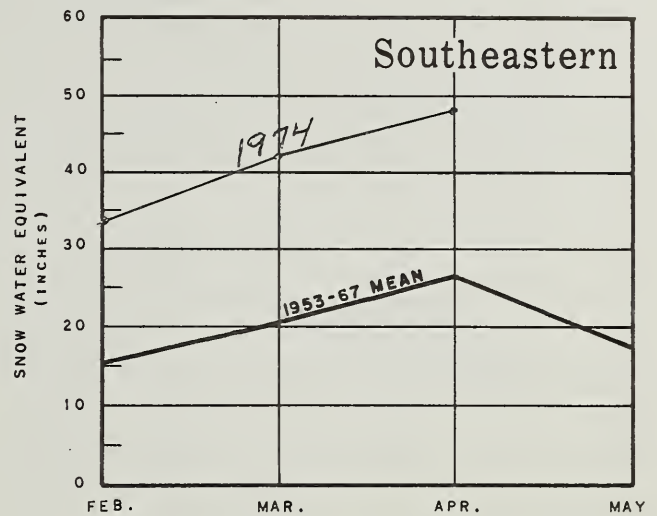
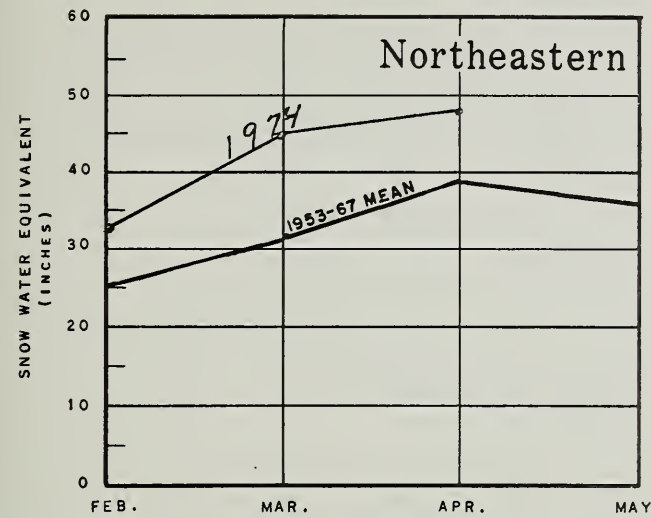
2/ - Departure from 15-year (1958-72) drainage division average.



# WASHINGTON SNOW COVER

1974

## DRAINAGE AREAS



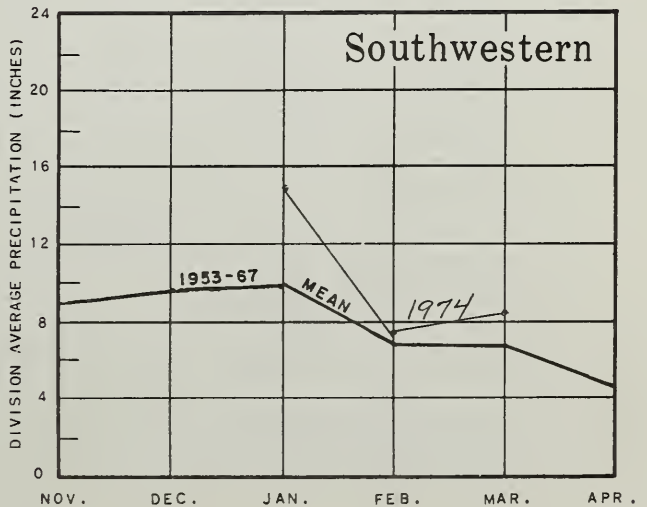
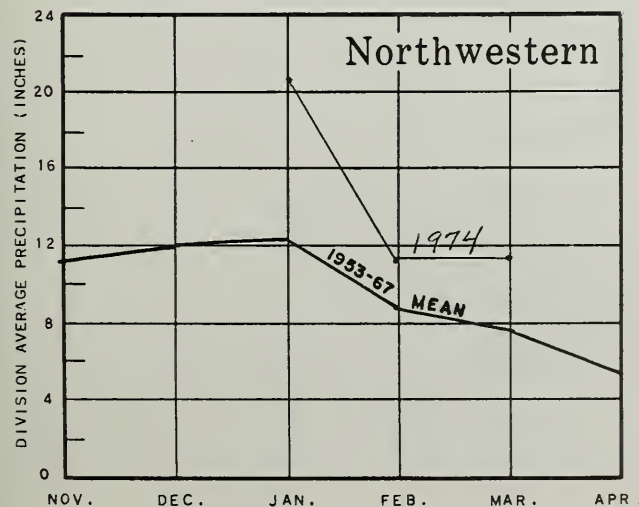
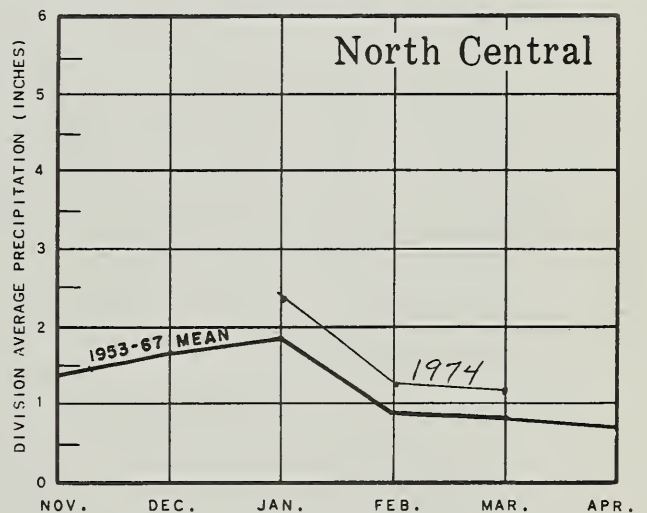
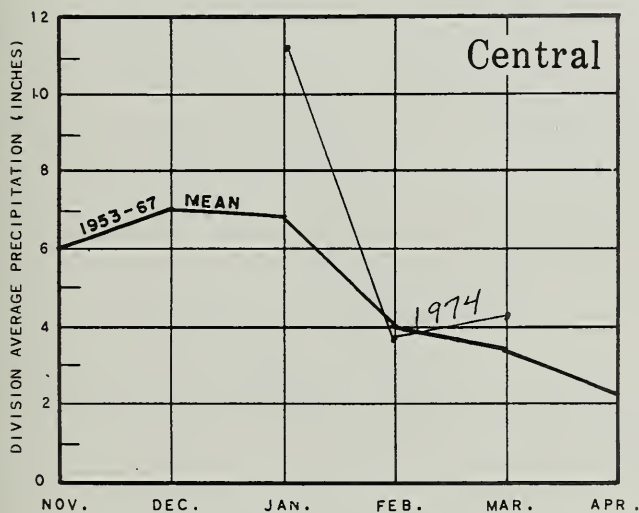
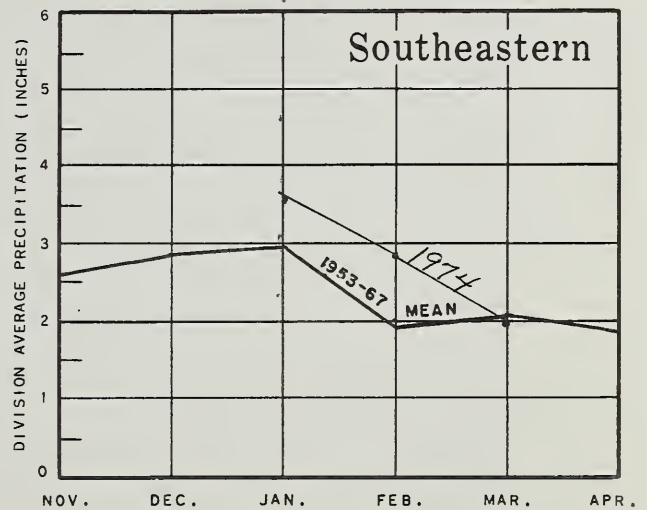
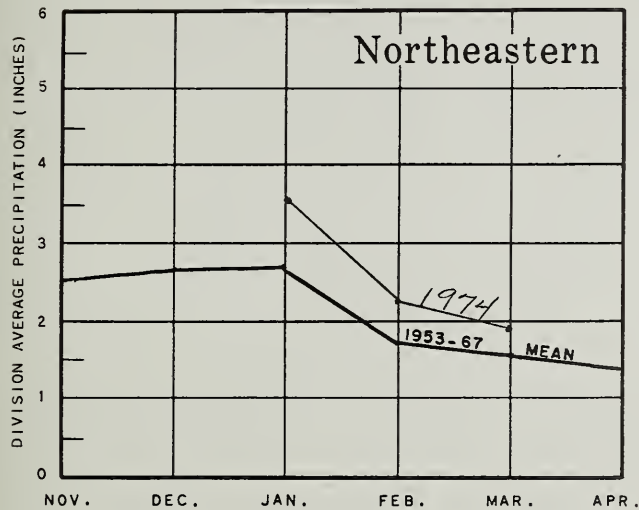




# WASHINGTON VALLEY PRECIPITATION

1974

## DRAINAGE AREAS





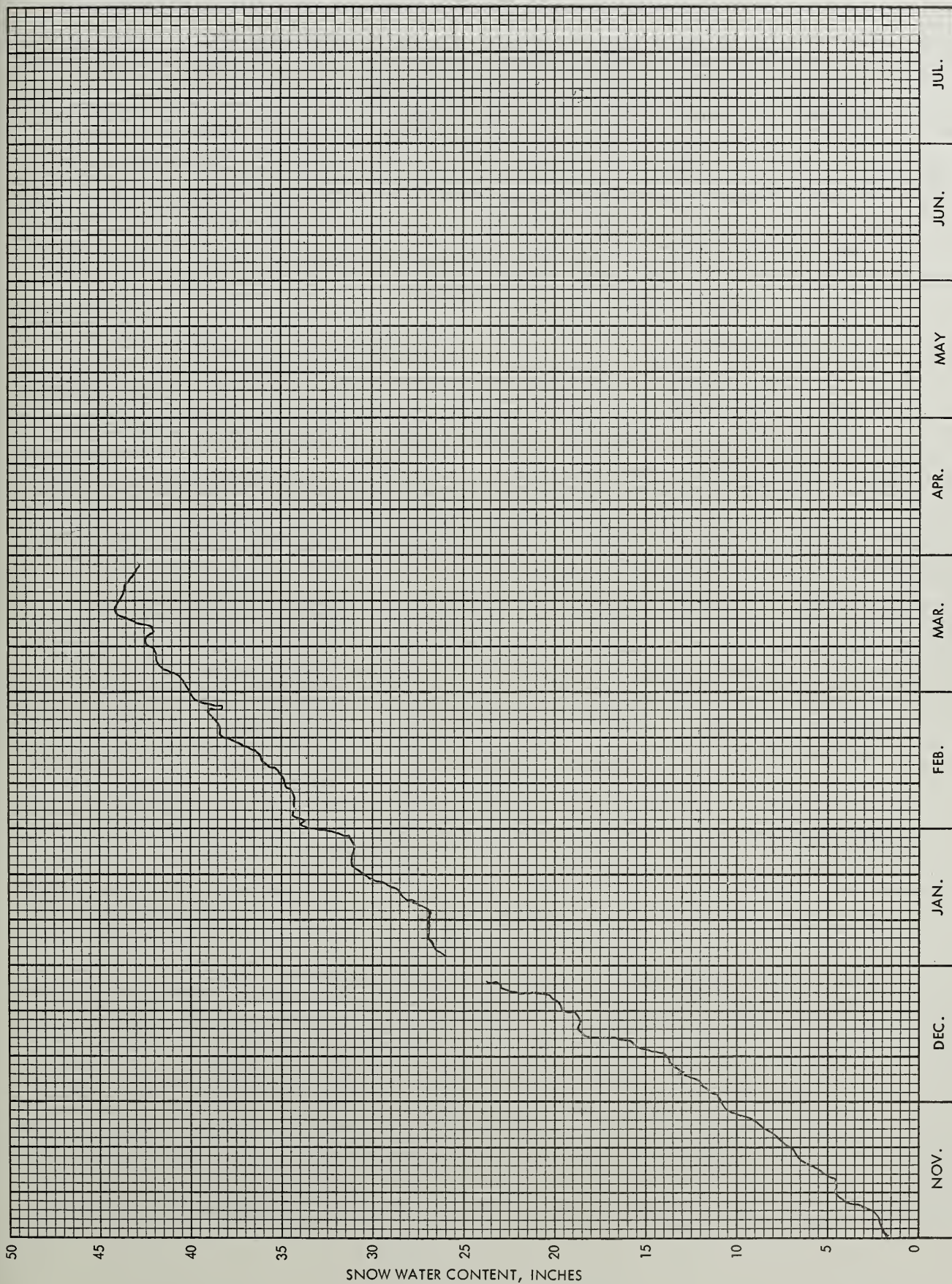
BERNE-MILL CREEK

SNOW PILLOW DATA

AS OF APRIL 1, 1974

Sec. 13 T. 26N R. 14E No. 21B41SP Drainage: Wenatchee R.

Lat. 47° 45' Long. 121° 42' Elev. 3240



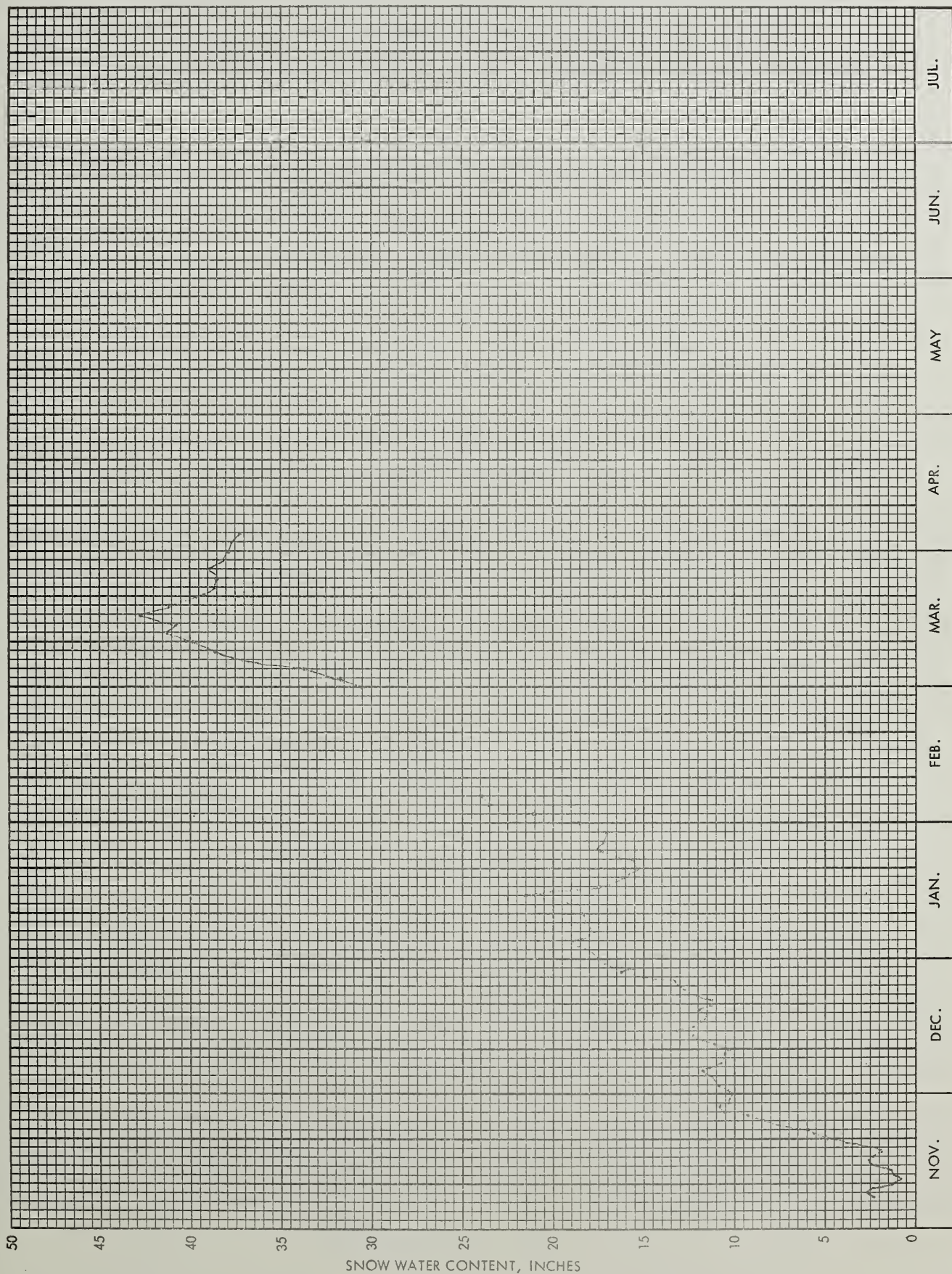




# SNOW PILLOW DATA

AS OF APRIL 1, 1946

Sec. 21 T. 21N R. 9E No. 21241SP Drainage: Grain River  
 Lat. 47° 17' Long. 120° 40' Elev. 3230'



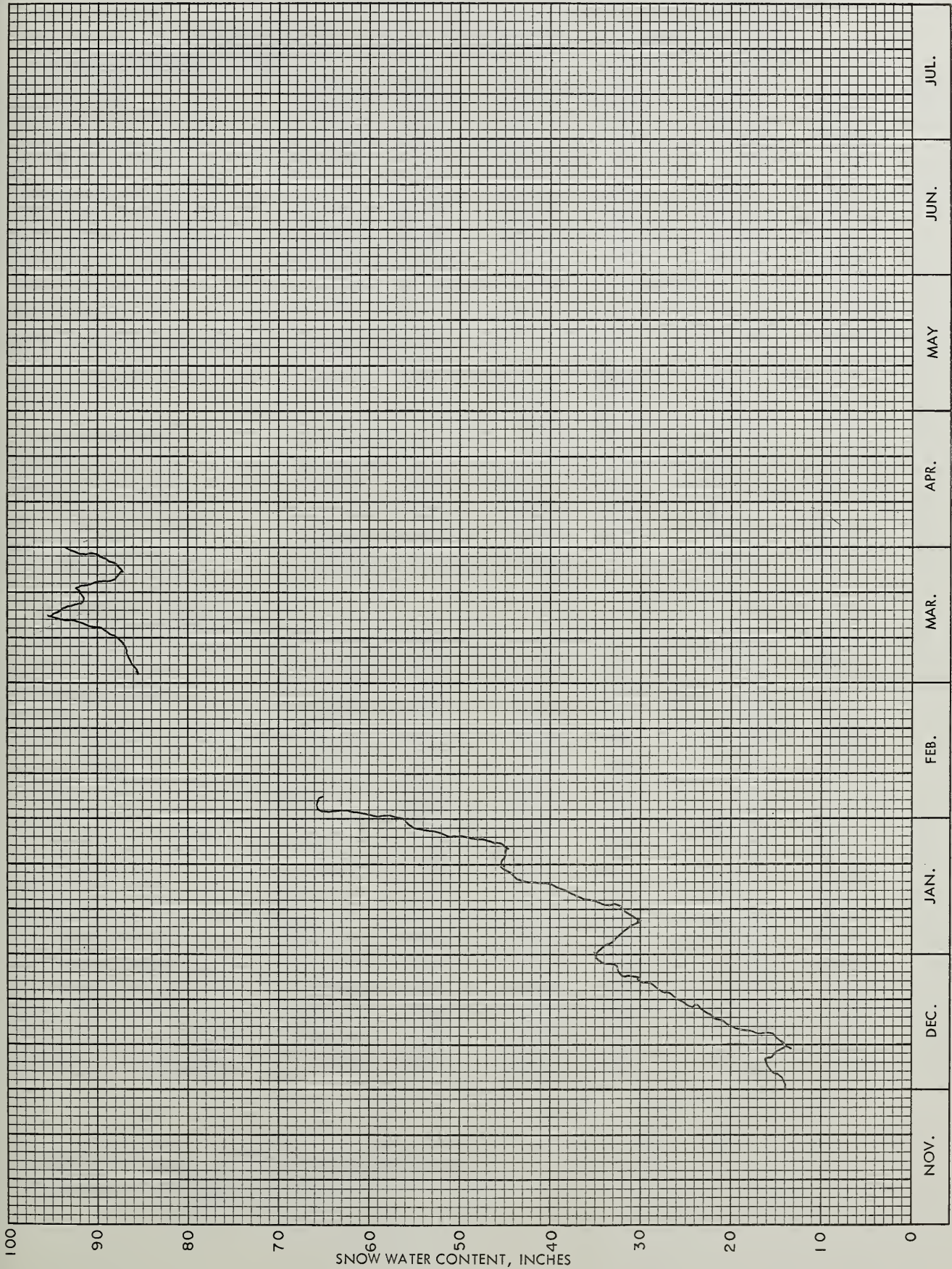




# SNOW PILLOW DATA

AS OF APRIL 1, 1974

Sec. 17 T. 39N R. 9E No. 21A25SP Drainage: Nooksack River  
 Lat. 48° 52' Long. 121° 40' Elev. 4300'







## SNOW DATA TO APRIL 1, 1974 - APPENDIX 1

## SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
			Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches)	
NAME	Number	Elevation				Last Year	Average #

## U P P E R C O L U M B I A D R A I N A G E

PEND OREILLE RIVER

Baree Creek	15B11	5500	4/2	180	75.0	31.1	49.4
Baree Midway	15B16	4600	4/1	131	54.1	24.4	37.7
Baree Trail	15B15	3800	4/2	40	15.4	0.0	9.6
Benton Meadow	16A02	2344	3/27	8	2.4	0.0	3.4
Benton Spring	16A03	4900	4/2	85	32.1	14.4	19.4
Boyer Mountain	17A02	5250	3/29	101	41.6	22.4	27.9
Brush Creek Timber	14A13	5000	3/27	39	13.0	8.1	-
Bunchgrass Meadow	17A01	5000	3/29	110	46.2	28.0	31.4
Chewelah	17A04	4923	4/1	Plowed Out		13.2	18.5
Heart Lake Trail	14C10	4800	3/27	81	33.0	9.2	23.4
Hoodoo Basin	15C10	6000	3/27	164	73.6	35.4	53.8
Hoodoo Creek	15C01	5900	3/27	154	67.7	33.4	50.3
Lookout	15B02	5250	3/14	140	48.2	20.0	35.6
			3/27	122	47.1	20.8	38.7
Mosquito Ridge	16A04A	5100	3/25	134	57.6	28.0	40.3
Nelson	19-Can	3050	3/29	63	20.8	12.4	15.7*
Schweitzer Bowl	16A06	4500	3/27	108	45.3	21.8	31.7
Schweitzer Ridge	16A05	6100	3/27	148	66.0	35.5	48.3
Smith Creek	16A01	4800	3/29	170	70.5	36.9	48.5
Winchester Creek	17A03	2970	3/29	42	13.2	5.6	11.8

KETTLE RIVER

Barnes Creek	90-Can	5300	3/29	67	23.6	16.7	21.2*
Big White Mtn.	154-Can	5500	3/31	76	30.0	18.4	19.8*
Bluejoint Mtn.	244-Can	7500	4/1	Not Measured		-	New
Boulder Road	18A02	1450	3/29	4	1.6	0.0	2.6
Butte Creek	18A03	4070	3/29	42	14.3	7.0	10.1
Cabin Creek	18A08	3170	3/29	33	10.8	5.0	9.2
Carmi	126-Can	4100	3/31	28	8.6	5.6	6.3*
Farron # 1	17-Can	4000	3/27	53	18.8	12.7	13.4*
Farron # 2	243-Can	4000	3/27	53	18.9	11.5	New
Goat Creek	18A04	3595	3/29	27	8.9	2.8	6.0
Graystoke Lake	5-Can	5950	3/27	71	28.5	18.6	23.1*
Monashee Pass	48A-Can	4500	3/29	44	15.8	11.6	14.1*
Old Glory Mountain	42-Can	7000	3/29	126	48.6	29.5	28.3*
Snow Caps Creek	18A05	2150	3/29	6	1.8	0.0	2.3
Snow Caps Trail	18A06	2720	3/29	19	5.9	0.6	5.7
Summit G. S.	18A07	4600	3/29	33	10.4	6.8	8.6
Trapping Creek Lower	166-Can	3050	3/31	19	5.4	0.8	3.3*
Trapping Creek Upper	165-Can	4450	3/31	39	14.4	9.4	9.5*

# Average based on 1958-1972 average

\* Average for years of record



## SNOW DATA TO APRIL 1, 1974 - APPENDIX 2

## SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
			Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches)	
NAME	Number	Elevation				Last Year	Average $\frac{\#}{\#}$

COLVILLE RIVER

Baird	17A06	3215	3/29	26	9.3	2.3	5.7
Carlson	18A09	2885	3/30	0	0.0	0.0	2.6
Chewelah	17A04	4925	4/1	Plowed Out		13.2	18.5
Stranger Mountain	17A05	4990	3/30	58	22.6	11.0	14.6
Togo	18A10	3370	3/30	47	17.0	6.5	12.5

SPOKANE RIVER

Above Burke	15B08	4100	3/27	83	31.3	10.6	25.6
Above Roland	15B07	4350	3/25	114	50.2	16.5	35.8
Below Roland	15B06	3770	3/25	52	21.8	3.1	17.4
Copper Ridge	16B02	4800	3/26	97	41.6	11.5	30.0
Forty-nine Meadows	15B03	5000	4/4	119	41.8	17.5	34.9
Fourth of July Summit	16B03	3100	3/14	45	14.4	2.6	9.3
			3/25	37	14.2	0.0	7.8
Granite Peak	15B13A	6000	4/4	174	59.0	31.7	47.5
Kellogg Peak	16B05A	5560	3/25	124	52.9	18.9	34.7
Lookout	15B02	5250	3/14	140	48.2	20.0	35.6
			3/27	122	47.1	20.8	38.7
Lost Lake	15B14A	6000	4/4	282	89.2	36.9	62.1
Lower Sands Creek	16B01	3400	3/26	82	31.2	8.4	20.7
Medicine Ridge	15B04A	6150	4/4	184	60.6	30.2	48.1
Mosquito Ridge	16A04A	5110	3/25	134	57.6	28.0	40.3
Roland Summit	15B05A	5200	3/25	139	59.5	21.5	39.2
Sherwin	16C01	3200	3/26	59	22.7	4.4	13.8
Sunset	15B09A	5600	3/25	126	52.0	20.7	39.3

SANPOIL RIVER

Sherman Creek Pass	18A01	5350	3/29	69	24.3	12.8	15.5
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OKANOGAN RIVER

Aberdeen Lake	6A-Can	4300	4/1	25	6.8	5.4	6.1*
Blackwall Peak	100-Can	6250	4/1	121	49.3	25.2	35.3*
Bouleau Creek	31-Can	5000	4/1	48	14.8	9.9	12.0*
Bouleau Lake	234-Can	4580	4/1	60	18.3	12.7	16.3*
Brenda Mine	193-Can	4800	3/29	53	19.3	11.8	14.0*
Brookmere	27-Can	3200	3/31	34	11.2	5.2	9.8*
Carrs Landing Upper	168-Can	3200	3/29	12	4.1	0.0	3.2*
Clark +	19A08a	7000	4/2	114	42.2	-	23.3
Enderby	130-Can	6250	3/29	125	50.2	34.6	38.9*
Esperon Creek Lower	164-Can	4400	3/31	51	18.1	10.5	12.9*
Esperon Creek Middle	163-Can	4700	3/31	62	23.9	14.1	15.9*
Esperon Creek Upper	162-Can	5400	3/31	78	31.7	14.6	19.5*

# Average based on 1958-72 average

\* Average for years of record

+ Snow water equivalent estimated from aerial stadia observation





## SNOW DATA TO APRIL 1, 1974 - APPENDIX 3

## SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
			Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches)	
NAME	Number	Elevation				Last Year	Average <sup>#</sup>

OKANOGAN RIVER (Cont.)

Freezeout Meadows New	20A38	5000	4/1	Late Report	23.7	-	
Graystoke Lake	5-Can	5950	3/27	71	28.5	18.6	23.1
Hamilton Hill	107-Can	4900	3/29	53	16.5	11.4	16.0*
Harts Pass	20A05A	6500	4/1	Late Report	33.3	46.4	
Horseshoe Basin +	19A05a	7000	4/2	72	26.6	16.1	13.5
Isintok Lake	152-Can	5510	3/30	40	13.4	6.9	8.1*
Lost Horse Mountain	105-Can	6300	4/1	44	12.6	8.2	9.1*
Loup Loup	19A07	4650	3/29	47	17.3	6.0	9.3
McCulloch	4-Can	4200	3/31	32	9.8	5.7	6.7*
Missezula Mountain	106-Can	5100	3/28	44	11.3	9.0	8.4*
Mission Creek	5A-Can	6000	3/27	80	29.8	17.5	20.0*
Monashee Pass	48A-Can	4500	3/29	44	13.8	11.6	14.1*
Mount Kobau	156-Can	5950	4/1	63	23.7	10.0	13.6*
Muckamuck +	19A09a	6390	4/2	83	30.7	-	17.8
Mutton Creek No. 1	19A01	5700	3/27	72	28.4	11.5	14.2
Mutton Creek No. 2	19A04	6000	3/27	71	26.8	11.9	15.4
Mutton Creek No. 2 SP	19A11SP	6000	3/27	-	22.6	8.6	New
New Copper Mountain	46A-Can	4300	4/1	Late Report	3.8	5.3*	
New Pentiction Res. # 2	183-Can	5225	3/28	44	13.0	6.9	8.8*
Nickel Plate Mtn.	47-Can	6200	3/30	36	12.3	5.5	7.9*
Oyama Lake	203-Can	4400	3/31	31	9.1	6.1	7.5*
Paysayten +	20A28a	4300	4/2	55	20.4	10.5	16.0
Postill Lake	55-Can	4500	3/29	37	13.7	8.6	8.9*
Quartette Lake	34-Can	4000	3/27	48	12.9	7.9	15.1*
Rusty Creek	19A03	4000	3/26	39	13.4	4.5	7.0
Salmon Meadows	19A02	4500	3/27	53	18.7	7.7	10.3
Silver Star Mountain	99-Can	6050	3/30	108	43.9	26.9	27.7*
Summerland Reservoir	3A-Can	4200	3/31	37	12.6	7.7	9.3*
Touts Coulee	19A06	2345	3/28	9	2.9	0.0	1.1
Trout Creek	3-Can	4700	3/28	36	9.6	6.2	7.5*
Vasseux Creek	233-Can	4600	3/31	32	8.6	4.6	7.7*
White Rocks Mountain	70-Can	6000	3/28	98	40.2	23.6	22.9*

ENTIAT RIVER

Blue Creek G. S.	20B28a	5425	4/2	139	57.8	28.1	New
Brief	20B19	1600	3/30	0	0.0	-	4.0
Entiat Meadows +	20A33a	4800	4/2	174	72.4	35.1	48.1
Entiat River Trail +	20A34a	3150	4/2	76	28.9	8.6	21.3
Four Mile Ridge +	20B27a	7000	4/2	124	51.6	23.4	-
Fox Camp +	20A36a	6510	4/2	182	75.7	42.9	59.0
Pope Ridge	20B20	4300	3/27	74	28.3	9.3	16.9
Pope Ridge SP	20B24SF	4300					
Pugh Ridge +	20A32a	6400	4/2	141	58.7	27.3	39.6

# Average based on 1958-1972 average

\* Average for years of record

+ Snow water equivalent estimated from aerial stadia observation



## SNOW DATA TO APRIL 1, 1974 - APPENDIX 4

## SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
			Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches)	
NAME	Number	Elevation				Last Year	Average <sup>#</sup>
<u>ENTIAT RIVER (Cont.)</u>							
Shady Pass	20A37	6200	3/28	108	45.1	21.3	-
Snow Brushy +	20A35a	3850	4/2	127	52.8	25.4	40.9
Tommy Creek +	20B21a	5300	4/2	94	39.1	15.6	27.1
<u>METHOW RIVER</u>							
Billy Goat Pass +	20A10a	6409	4/2	120	44.4	-	32.0
Dollar Watch +	20A29a	7000	4/2	108	40.0	23.8	29.3
Harts Pass	20A05A	6500	4/1	Late Report		33.3	46.4
Horseshoe Basin +	19A05a	7000	4/2	72	26.6	16.1	13.5
Loup Loup	19A07	4650	3/29	47	17.3	6.0	9.3
Mutton Creek No. 1	19A01	5700	3/27	72	28.4	11.5	14.2
Mutton Creek No. 2	19A04	6000	3/27	71	26.8	11.9	15.4
Mutton Creek No. 2 SP	19A11SP	6000	3/27	-	22.6	8.6	New
Rusty Creek	19A03	4000	3/26	39	13.4	4.5	7.0
Salmon Meadows	19A02	4500	3/27	53	18.7	7.7	10.3
War Creek Pass +	20A31a	6500	4/2	153	56.6	29.4	43.5
<u>CHELAN LAKE BASIN</u>							
Cloudy Pass +	20A22a	6500	3/24	173	77.8	35.0	54.0
Greenwood Flat +	20A25a	3540	3/24	100	44.0	17.1	24.8
Little Meadows +	20A24a	5275	3/24	180	79.2	35.7	45.8
Lyman Lake	20A23A	5900	3/24	204	91.6	43.3	61.5
Park Creek Flat +	20A13a	2220	4/1	Not Measured		-	34.3
Park Creek Ridge	20A12A	4600	3/31	160	61.6	31.6	46.1
Petersons +	20A16a	3730	4/1	Not Measured		-	32.2
Rainy Pass	2CA09	4780	4/1	Late Report		30.8	41.6
Safety Harbor	20A30A	6300	3/25	116	44.3	21.5	29.9
War Creek Pass +	20A31a	6500	4/2	153	56.6	29.4	43.5
<u>WENATCHEE RIVER</u>							
Berne-Mill Creek	21B23	3170	3/28	103	43.0	16.8	27.6
Berne-Mill Creek New SP	21B41SP	3240	3/28	90	42.2	12.8	23.3
Blewett Pass No. 2	20B02	4270	3/27	59	26.0	7.4	16.5
Chiwaukum G. S.	20B16	1810	3/28	45	15.9	0.0	10.5
Fish Lake	21B04	3371	3/27	118	50.6	17.9	35.1
Lake Wenatchee	20B05	1970	3/28	47	18.4	2.1	11.9
Leavenworth R. S.	20B17	1127	3/15	3	1.4	0.0	-
			4/1	0	0.0	0.0	0.7
Lyman Lake	20A23A	5900	3/24	204	91.6	43.3	61.5
Merritt	20B18	2140	3/28	55	22.4	4.1	14.9
Stevens Pass	21B01	4070	3/15	201	83.1	34.0	50.8
			3/28	168	77.0	35.0	53.7
Stevens Pass Sand Shed	21B45	3700	3/15	162	64.8	20.3	-
			3/28	131	60.8	20.8	-

# Average based on 1958-1972 average

+ Snow water equivalent estimated from aerial stadia observation





## SNOW DATA TO APRIL 1, 1974 - APPENDIX 5

## SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
			Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches)	
NAME	Number	Elevation				Last Year	Average <sup>#</sup>
<u>SQUILCHUCK CREEK</u>							
Beehive Springs	20B03	4400	3/28	33	15.1	6.2	7.8
Scout-A-Vista	20B04	3400	3/28	33	11.8	4.2	6.9
<u>STEMILT CREEK</u>							
Jump-Off	20B08	4450	3/26	36	12.8	6.0	8.0
Stemilt Slide	20B06	5000	3/26	53	22.3	9.0	15.5
Upper Wheeler	20B07	4400	3/26	30	11.4	5.7	9.0
<u>COLOCKUM CREEK</u>							
Colockum Creek Upper	20B22	5300	3/27	49	20.3	10.0	-
Colockum Creek Lower	20B23	4300	3/27	38	13.5	5.8	-
<u>YAKIMA RIVER</u>							
Ahtanum R. S.	21C11	3100	3/26	22	10.6	0.0	5.2
Big Boulder Creek	21B09	3200	3/27	82	39.0	7.1	18.0
Blewett Pass No. 2	20B02	4270	3/27	59	26.0	7.4	16.5
Bumping Lake	21C08	3450	3/15	81	27.9	7.9	16.9
			4/1	72	28.2	6.6	16.2
Bumping Lake New	21C36	3400	3/15	93	34.6	10.5	21.4
			4/1	84	36.2	8.8	20.7
Cayuse Pass	21C06	5300	4/1	Late Report		54.5	90.2
Colockum Pass	20B09	5370	3/26	65	23.6	11.1	17.4
Cooke Creek	20B10	4123	3/26	30	11.4	0.0	5.1
Corral Pass	21B13	6000	4/1	Late Report		32.5	42.0
Fish Lake	21B04	3371	3/27	118	50.6	17.9	35.1
Green Lake	21C10	6000	4/2	120	52.0	23.0	36.2
Grouse Camp	20B11	5385	3/22	69	25.3	11.0	17.1
High Creek	20B12	2930	3/22	23	8.6	0.0	2.3
Joe Lake	21B46a	4624	3/25	230	98.9	42.4	-
Lake Cle Elum	21B14M	2200	3/14	35	13.0	0.0	7.8
			4/1	20	7.8	0.0	4.5
Lemah Creek +	21B47a	3327	3/25	150	64.5	31.2	-
Manashtash	20C01	3935	3/26	20	7.4	0.0	2.2
Morse Lake	21C17	5400	4/1	Late Report		42.8	61.8
Nanum	20B13	2340	3/22	42	13.9	4.1	8.2
Olallie Meadows	21B02	3625	4/1	Late Report		19.6	48.8
Satus Pass	20D01	4030	3/28	44	16.2	0.0	8.6
Stampede Pass SP	21B10	3860	4/2	162	61.1	27.2	43.4
Trail Creek	20B14	3360	3/26	0	0.0	0.0	0.1
Tunnel Avenue	21B08	2450	3/14	94	36.2	9.2	24.0
			4/1	84	35.8	8.2	24.1
Van Epps Pass +	20B26a	5925	3/25	173	74.4	36.4	-

# Average based on 1958-1972 average

+ Snow water equivalent estimated from aerial stadia observation





## SNOW DATA TO APRIL 1, 1974 - APPENDIX 6

## SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
			Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Number	Elevation				Last Year	Average <sup>#</sup>

YAKIMA RIVER (Cont.)

Walters Flat	20B15	3360	3/22	32	10.6	0.0	5.3
Waptus Lake +	21B49a	3024	3/25	139	59.8	24.4	-
White Pass (E. Side)	21C28	4500	3/18	105	39.7	11.1	24.7
			4/2	98	36.9	11.9	25.9
White Pass (L. Lake)	21C27	4500	3/28	104	44.9	14.4	31.1

ANTANUM CREEK

Ahtanum R. S.	21C11	3100	3/26	22	10.6	0.0	5.2
Green Lake	21C10	6000	4/2	120	52.0	23.0	36.2

LOWER COLUMBIAASOTIN CREEK

Spruce Springs	17C04	5700	3/25	94	39.5	14.2	26.6
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MILL CREEK

Homestead	17C01	4030	3/27	38	16.9	2.4	7.3
Martin Springs	17C02	4400	3/27	62	25.7	5.2	14.2
Tollgate	18D3M	5070	3/27	102	48.4	15.0	25.1

KLICKITAT RIVER

Satus Pass	20D01	4030	3/28	44	16.2	0.0	8.6
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WHITE SALMON RIVER

Cultus Creek	21C12	4000	4/3	187	82.7	24.7	49.4
Surprise Lakes	21C13A	4250	3/31	199	87.3	22.3	53.9

WIND RIVER

Old Man Pass	21D19	3100	3/30	73	32.9	4.4	19.7
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LEWIS RIVER

Blue Lake +	21C22a	4800	3/29	300	132.0	50.2	84.8
Bob's Trail	21C21	2200	3/29	55	24.2	0.0	15.1
Calamity Ridge +	22D01a	2500	3/29	12	5.5	0.0	5.6
Council Pass +	21C18a	4200	3/29	144	63.4	23.5	42.9
Cultus Creek	21C12	4000	4/3	187	82.7	24.7	49.4
Divide Meadow +	21C29a	5600	3/29	180	79.2	31.9	60.6
Grand Meadow	21C25	3500	3/31	98	44.1	11.0	27.7
Lone Pine Shelter	21C26	3800	4/1	Late Report		21.4	43.3
Marble Mountain +	22C05a	3200	3/29	140	68.6	13.2	38.2
Mosquito Meadows	21C19	4100	4/1	Late Report		22.6	44.9
New Muddy River	22C06	2000	3/30	7	3.4	0.0	9.5

# Average based on 1958-72 average

+ Snow water equivalent estimated from aerial stadia observation



## SNOW DATA TO APRIL 1, 1974 - APPENDIX 7

## SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
			Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Number	Elevation				Last Year	Average $\frac{7}{7}$

LEWIS RIVER (Cont.)

Old Man Pass	21D19	3100	3/30	73	32.9	4.4	19.7
Plains of Abraham +	22C01a	4400	3/29	242	108.9	44.4	71.8
Smith Creek Road	22C04	2100	3/30	51	23.9	0.0	17.7
Spencer Meadow +	21C20a	3400	3/29	104	47.8	9.2	25.7
Surprise Lakes	21C13A	4250	3/31	199	87.3	22.3	53.9
Table Mountain +	21C24a	4200	3/29	176	77.4	28.0	48.8
Timbered Peak +	21D18a	3000	3/29	72	33.1	2.5	17.8

COWLITZ RIVER

Cayuse Pass	21C06	5300	4/1	Late Report		54.5	90.2
Mosquito Meadows	21C19	4100	4/1	Late Report		22.6	44.9
Ohanapecosh	21C32	2200	4/1	Late Report		0.0	15.7
Packwood Lake	21C31	2870	4/1	Late Report		0.0	13.1
Pigtail Peak	21C33	5900	3/28	194	84.0	37.8	64.7
Plains of Abraham +	22C01a	4400	3/29	242	108.9	44.4	71.8
Potato Hill	21C14	4500	4/1	Late Report		17.9	33.3
White Pass (E. Side)	21C28	4500	3/18	105	39.7	11.1	24.7
			4/2	98	36.9	11.9	25.9
White Pass (L. Lake)	21C27	4500	3/28	104	44.9	14.4	31.1
Willame Creek	21C30	3250	4/1	Late Report		13.8	31.4

PUGET SOUND DRAINAGENISQUALLY RIVER

Ghost Forest	21C04	4550	3/27	154	71.3	25.7	48.0
Longmire	21C03	2760	3/27	52	23.5	0.0	10.2
New Paradise Park	21C35	5500	3/27	215	108.8	48.6	74.1
Stem Glade	21C01	5050	3/27	210	95.6	42.6	73.4

WHITE RIVER

Cayuse Pass	21C06	5300	4/1	Late Report		54.5	90.2
Corral Pass	21B13	6000	4/1	Late Report		32.5	42.0
Morse Lake	21C17	5400	4/1	Late Report		42.8	61.8

GREEN RIVER

Airstrip	21B24	1800	4/4	0	0.0	0.0	1.3
Charley Creek	21B25	1200	4/4	0	0.0	0.0	0.0
Cougar Mountain SP	21B42SP	3200	4/3	83	36.6	5.0	-
Grass Mtn. No. 2	21B27	2900	4/4	96	41.7	10.7	24.4
Grass Mtn. No. 3	21B28	2100	4/4	3	1.5	0.0	4.4
Lester Creek	21B29	3100	4/4	98	40.2	12.7	27.0
Lynn Lake	21B50	4000	4/4	109	51.7	10.7	-

# Average based on 1958-72 average

+ Snow water equivalent estimated from aerial stadia observation





## SNOW DATA TO APRIL 1, 1974 - APPENDIX 8

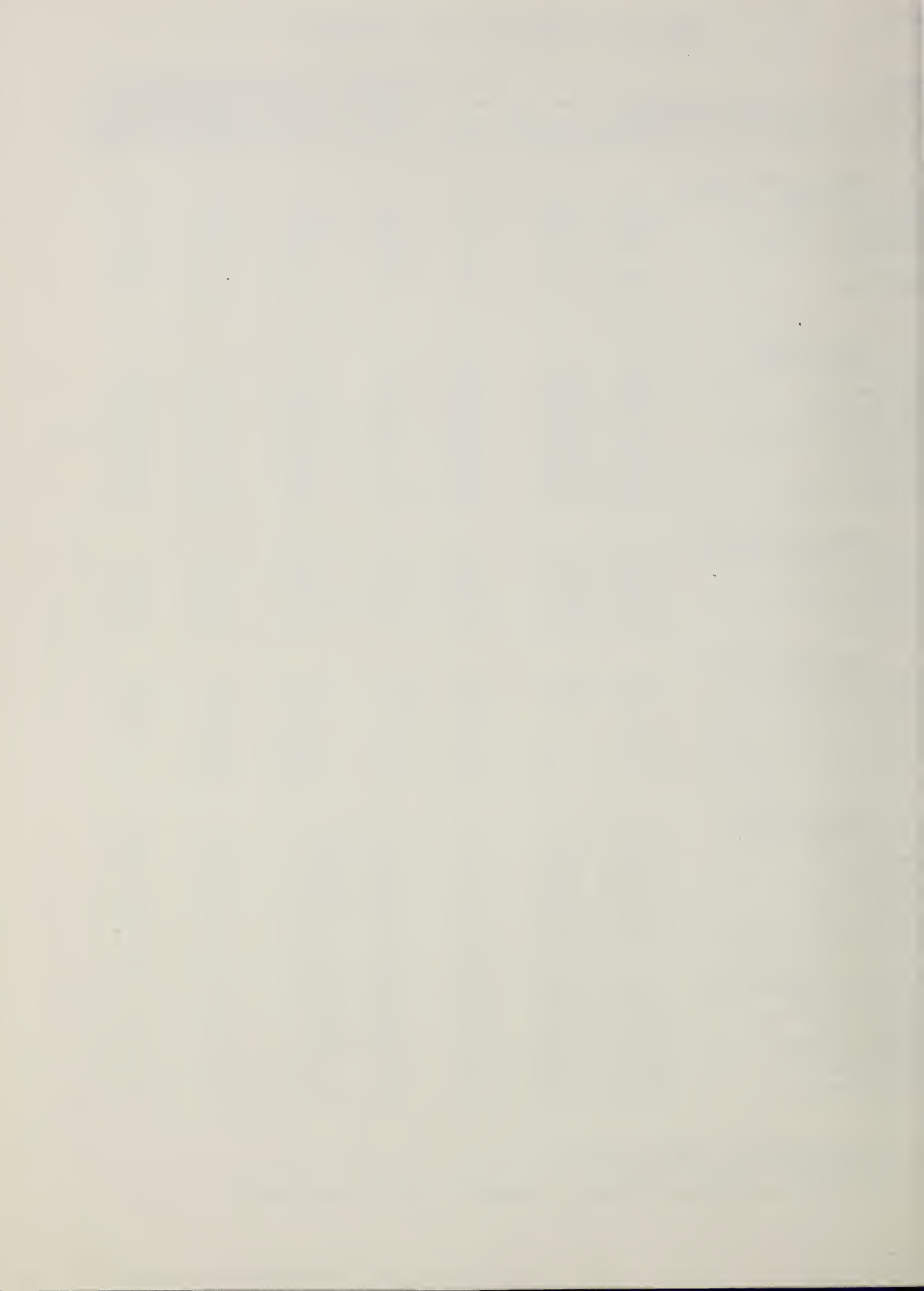
## SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
			Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches)	
NAME	Number	Elevation				Last Year	Average $\frac{1}{2}$
<u>GREEN RIVER (Cont.)</u>							
Sawmill Ridge	21B31	4700	4/4	144	61.0	19.7	41.5
Snowshoe Butte SP	21B43SP	5000	4/1	Late Report		38.2	-
Stampede Pass SP	21B10	3860	3/15	195	66.8	26.0	41.2
			4/2	162	61.1	27.2	43.4
Twin Camp	21B30	4100	4/4	103	44.5	15.3	25.9
<u>CEDAR RIVER</u>							
City Cabin	21B03	2390	3/27	69	31.8	3.0	15.5
Mt. Gardner	21B21	3300	3/29	69	33.5	0.0	18.0
Mt. Lindsay	21B16	2500	3/29	56	24.4	5.7	15.9
Mt. Washington New	21B52	3000	3/29	35	16.4	0.0	New Course
Rex River	21B17	2400	3/29	75	33.2	4.8	13.5
S. F. Cedar	21B06	3000	3/27	83	38.3	5.6	20.6
Tinkham Creek	21B20	3400	3/27	102	48.7	6.5	23.7
<u>SNOQUALMIE RIVER</u>							
Alpine Meadow	21B48	3500	3/28	162	82.0	25.9	-
Lake Elizabeth	21B19	2900	3/26	165	82.8	19.7	48.5
Olallie Meadows	21B02	3625	4/1	Late Report		19.6	48.8
S. F. Tolt	21B18	1900	3/28	0	0.0	0.0	0.8
<u>SKYKOMISH RIVER</u>							
Lake Elizabeth	21B19	2900	3/26	165	82.8	19.7	48.5
Stevens Pass	21B01	4070	3/15	201	83.1	34.0	50.8
			3/28	168	77.0	35.0	53.7
Stevens Pass S. Shed	21B45	3700	3/15	162	64.8	20.3	-
			3/28	131	60.8	20.8	-
<u>SKAGIT RIVER</u>							
Beaver Creek Trail	21A04	2200	4/1	Late Report		3.6	12.6
Beaver Pass	21A01	3680	4/1	Late Report		19.0	33.7
Brown Top	21A28a	6000	4/1	Late Report		50.0	-
Cloudy Pass	20A22a	6500	4/1	Late Report		35.0	54.0
Devils Park	20A04	5900	4/1	Late Report		34.0	45.6
Freezeout Cr. Trail	20A01	3500	3/8	68	21.7	8.6	11.8
			4/1	Late Report		9.2	12.5
Freezeout Meadows New	20A38	5000	4/1	Late Report		23.7	29.9
Granite Creek	21A29	3500	4/1	Late Report		11.4	-
Harts Pass	20A05A	6500	4/1	Late Report		33.3	46.4
Hozomeen Lake	21A02	2600	4/1	Late Report		3.1	9.0
Klesilkwa	35B-Can	3700	4/2	53	21.6	6.8	15.3*
Lyman Lake +	20A23A	5900	4/1	Late Report		43.3	61.5

# Average based on 1958-72 average

\* Average for years of record

+ Snow water equivalent estimated from aerial stadia observation



## SNOW DATA TO APRIL 1, 1974 - APPENDIX 9

## SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
			Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches)	
NAME	Number	Elevation				Last Year	Average <sup>†</sup>
<u>SKAGIT RIVER (Cont.)</u>							
Meadow Cabins	20A08	1900	4/1	Late Report		1.0	6.0
New Hozomeen Lake	21A30	2800	4/1	Late Report		6.6	-
New Tashme	26A-Can	2500	4/1	36	14.6	1.5	10.8*
Quartette Lake	34-Can	4000	3/27	48	12.9	7.9	15.1*
Rainy Pass	20A09	4780	4/1	Late Report		30.8	41.6
Thunder Basin	20A07	4200	4/1	Late Report		15.5	23.9
<u>BAKER RIVER</u>							
Baker Pass +	21A27a	4900	3/7	288	109.0	-	-
			4/1	Late Report		-	-
Dock Butte	21A11A	3800	3/7	248	94.0	45.6	61.3
			3/15	246	103.0	-	74.3
			4/1	Late Report		56.2	71.3
Easy Pass	21A07A	5200	3/7	264	100.0	41.8	72.0
			3/15	272	101.0	-	79.1
			4/1	Late Report		61.7	87.0
Jasper Pass	21A06A	5400	3/7	292	111.0	60.0	81.6
			3/15	292	122.0	-	83.5
			4/1	Late Report		69.4	99.0
Komo Kulshan	21A17	800	4/1	Late Report		0.0	6.0
Marten Lake	21A09A	3600	3/7	264	100.0	57.0	59.4
			3/15	268	112.0	-	72.0
			4/1	Late Report		59.8	78.1
Mount Blum +	21A18a	5800	3/7	198	75.0	47.5	58.2
			3/15	188	79.0	-	-
			4/1	Late Report		-	-
Panorama New	21A26	4300	3/12	246	111.5	55.1	-
			3/28	223	112.0	59.3	-
Rocky Creek	21A12A	2100	3/7	130	49.0	11.4	25.4
			3/15	124	52.0	-	28.7
			4/1	Late Report		16.9	29.2
Schreibers Meadow	21A10A	3400	3/7	216	82.0	27.4	53.8
			3/15	191	80.0	-	57.3
			4/1	Late Report		47.2	65.6
S. F. Thunder Creek	21A14A	2200	3/7	48	18.0	0.0	8.1
			3/15	46	19.0	-	9.4
			4/1	Late Report		0.0	5.3
Sulphur Creek	21A13	1600	4/1	Late Report		2.2	13.6
Three Mile Creek	21A15	4500	4/1	Late Report		0.0	1.7
Watson Lakes	21A08A	4500	3/15	230	97.0	-	61.1
			4/1	Late Report		47.8	71.2

# Average based on 1958-72 average

\* Average for years of record

+ Snow water equivalent estimated from aerial stadia observation





## SNOW DATA TO APRIL 1, 1974 - APPENDIX 10

**SNOW**

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
			Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches)	
NAME	Number	Elevation				Last Year	Average <sup>†</sup> / <sub>1958-72</sub>
<u>NOOKSACK RIVER</u>							
Bald Mountain +	21A19a	4400	4/4	192	92.2	44.6	51.0
Canyon +	21A20a	5100	4/4	240	115.2	61.2	60.0
Glacier Creek	21A23	3700	3/28	97	43.2	15.1	23.4
Panorama New	21A26	4300	3/12	246	111.5	55.1	-
			3/28	223	112.0	59.3	-
Twin Lakes +	21A21a	5200	4/4	254	121.9	72.4	79.1

O L Y M P I C P E N I N S U L A

<u>MORSE CREEK</u>							
Cox Valley	23B14	4500	3/31	144	60.9	31.1	-
<u>ELWHA RIVER</u>							
Hurricane	23B03	4500	3/30	91	36.8	16.5	26.1
<u>SKOKOMISH RIVER</u>							
Black & White	23B07	4200	4/3	167	69.5	32.2	45.6
Black & White Lakes	23B06	4700	4/3	208	95.0	52.3	65.8
Four Streams	23B10	3000	4/3	127	56.6	20.1	34.7
Home Sweet Home	23B05	5200	4/3	264	113.7	62.5	80.6

LATE REPORTS

<u>WHITE RIVER</u>							
Corral Pass	21B13	6000	4/6	153	63.7		
<u>SNOQUALMIE RIVER</u>							
Olallie Meadows	21B02	3625	4/5	184	89.1		

# Average based on 1958-72 average

+ Snow water equivalent estimated from aerial stadia observation.



# Agencies Assisting with Snow Surveys

## GOVERNMENT AGENCIES

### Canada:

Department of Lands, Forests and Water Resources,  
Water Resources Service, British Columbia

### States:

Washington State Department of Ecology  
Washington State Department of Natural Resources

### Federal:

Department of the Army  
Corps of Engineers  
U. S. Department of Agriculture  
Forest Service  
U. S. Department of Commerce  
NOAA, National Weather Service  
U. S. Department of the Interior  
Bonneville Power Administration  
Bureau of Reclamation  
Geological Survey  
National Park Service

## PUBLIC AND PRIVATE UTILITIES

Chelan County P.U.D.  
Pacific Power and Light Company  
Puget Sound Power and Light Company  
Washington Water Power Company

## OTHER PUBLIC AGENCIES

Okanogan Irrigation District  
Wenatchee Heights Irrigation District

## MUNICIPALITIES

City of Tacoma  
City of Seattle

*Other organizations and individuals furnish valuable information for snow survey reports. Their cooperation is gratefully acknowledged.*

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